



## Research team

Rarita Zbranca – Cluj Cultural Centre  
Mafalda Dâmaso – Erasmus University of Rotterdam  
Oana Blaga – Babes-Bolyai University  
Kornélia Kiss – Culture Action Europe  
Marina Denisa Dascal – Babes-Bolyai University  
Dana Yakobson – Aalborg University  
Oana Pop – Babes-Bolyai University

## Coordination

Rarita Zbranca – Cluj Cultural Centre  
Kornélia Kiss – Culture Action Europe

## Editing and design

Editing and proofreading: Calum Smith; David Callahan  
Graphic Design: Trine Obbekær; Lucrezia Ponzano  
Visuals: ArtiViStory Collective - Artists: Evelina Grigorean; Melinda Ureczki Lázár; Teodora Predescu;  
Andrian Buda and Lucian Barbu.  
Visual Coordinator: Alice Iliescu

## Advisory Board

Nils Fietje – World Health Organization  
Anita Jensen – Competence Center for Primary Healthcare in Sweden  
Katey Warran – University College of London - WHO Collaborating Centre for Arts & Health  
Robert Manchin – Europa Nova  
Ugne Grigaite – Lisbon Institute of Global Mental Health; NGO Mental Health Perspectives  
Marius Ungureanu – Department of Public Health, Babes-Bolyai University Cluj  
Mette Steenberg – Interacting Minds Centre, Aarhus University  
Luisella Carnelli – Fondazione Fitzcarraldo  
Annalisa Cicerchia – Istituto Nazionale di Statistica; Cultural Welfare Center, Italy  
Dorota Sienkiewicz – EuroHealthNet

## Acknowledgements

Tere Badia, Claudia Cacovean, Gabriele Rosana, Natalie Giorgadze, Maya Weisinger, Mikkel Ottow, Dace Resele, Inga Surgunte, Fairouz Tamimi, Carmen Valero, Ieva Vitola-Deusa, Lina Papartyte, Stefan Teisanu, Samuele Tonello, Polona Torkar, Pia Wiborg Astrup

## Partners

Culture Action Europe, Cluj Cultural Centre, Trans Europe Halles, Central Denmark Region, The Northern Dimension Partnership on Culture and Društvo Asociacija

### Disclaimer

*The European Commission's support for the production of this publication does not constitute an endorsement of its contents, which reflect the views only of the authors, and the Commission cannot be held responsible for any use that may be made of the information contained herein.*

ISBN : 978-2-9603183-0-2

Published under a Creative Commons Attribution-ShareAlike 4.0 International license (CC BY-SA 4.0)

<https://creativecommons.org/licenses/by-sa/4.0/>

### Suggested citation

Zbranca, R., Dâmaso, M., Blaga, O., Kiss, K., Dascal, M. D., Yakobson, D., & Pop, O. (2022). *CultureForHealth Report. Culture's contribution to health and well-being. A report on evidence and policy recommendations for Europe*. CultureForHealth. Culture Action Europe.

[www.cultureforhealth.eu](http://www.cultureforhealth.eu)

December 2022



Co-funded by the  
European Union




# Table of contents



Foreword	4
Introduction	5
<b>Executive summary</b>	7
<b>Report Methodology</b>	24
Scoping Review Protocol	25
Scoping Review Methodology	26
Policy Recommendations Methodology	30



<b>Scoping Review Findings</b>	31
1. Culture and Health	33
2. Culture and Subjective Well-being	58
3. Culture and Community Well-being	80
4. Culture and COVID-19	106
<b>Factors influencing the effectiveness of interventions</b>	109
<b>Discussion</b>	117



<b>Policy considerations</b>	127
The Findings of the Data Extraction: What Works and What Could Work Better?	128
Policy Recommendations – or What Can Be Done?	135
Policy Programme – or What Kind of Impact Can Be Expected and How Can It Best Be Facilitated?	142
Specific Policies and Targeted Investment Measures	147
Culture, Health and Well-being: Addressing European Challenges	152



<b>References</b>	162
<b>Appendices</b>	184
Appendix I: Search Strategy and Terms	185
Appendix II: PRISMA flow diagram	187
Appendix III: Data extraction form	188

## Foreword

The preamble to the WHO's Constitution defines health as 'a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity' (WHO, 1947). However, 75 years later, health promotion is only rarely recognised as being as important as disease prevention. Moreover, health strategies are seldom designed with the aim of fostering well-being. Rather, health resources in the European Union remain overwhelmingly focused on disease treatment.

At a time of multiple and overlapping health crises, the CultureForHealth consortium believes that a more holistic approach to health is needed and that culture can potentially contribute to this paradigm shift.

The patterns uncovered by the review of the literature (following the process described in chapter I. Scoping Review Protocol) suggest that this belief is not unjustified.

In making this point, it is important to stress that this report is not a systematic review. Its aim is not to provide an exhaustive account of existing research regarding the potential health and well-being benefits of culture. Rather, it is developed in the context of the Preparatory Action Bottom-up Policy Development for Culture and Well-being in the EU (2020). As its name suggests, the goal of such an action is to identify principles to prepare the future work of EU policymakers regarding what the latter recognise as an important but nonetheless incipient interdisciplinary field, thus increasing policy momentum.

In other words, the report does not have the aim of delivering an in-depth review of existing research or an analysis of the differences in how the medical sciences on the one hand and the arts and humanities on the other hand understand evidence. Additionally, the authors' decision to place these two fields on an equal level explains why the report does not use standard assessment criteria – doing so would require making epistemological assumptions regarding hierarchies of evidence that would be, at the very least, counterproductive. This being said, as the policy recommendations make clear, the authors recognise that these are crucial issues requiring further examination. For more on the rationale underpinning the report, see the subchapter Scoping Review Methodology.

We hope that the report will help to steer investment towards this field, and that this will fund research focused on addressing existing knowledge gaps while also supporting continued programme experimentation from the bottom-up across the European Union.

# Introduction

There is a growing awareness in the European Union (EU) of the critical role of culture and the arts in improving health and well-being at both the individual and collective level. Concurrently, the ambition to harness the positive effects of cultural approaches to well-being is growing at the policy level. Yet, designing sustainable interventions at a policy level that reliably implement a change of approach and strategy at practitioner level is no trivial task. This requires knowledge of recent developments in methods and evidence across disciplines, and an empirically based understanding of the enablers and barriers in the implementation of existing interventions with the aim of transforming approaches.

The research covering this field is vast, rapidly expanding and highly interdisciplinary. This report aims to narrow the gap between the fast-growing knowledge on the impact of culture and arts on human health and well-being, and the policies at EU level.

The aim of this scoping review is to offer a broad overview of the existing evidence on the effect of arts and cultural activities on health and well-being. This means the review is not limited to a few research questions but seeks to provide an indication of the volume of existing literature, the key concepts, focus points and the types of culture and arts interventions that exist. It also strives to identify knowledge gaps in the existing literature. Finally, it gathers policy recommendations and identifies challenges, further expanding the scope of the report beyond the proposed policy directions and specific policy measures.

The World Health Organization (WHO) published the scoping review *What is the evidence on the role of the arts in improving health and well-being?* in 2019, advancing knowledge and raising awareness in this field. Our scoping review takes stock of the findings of the WHO report and further builds on it. It uses a similar approach in presenting the evidence on the contribution of the arts to health, adding the dimensions of subjective and community well-being to expand its perspective beyond health to the social and personal spheres. Moreover, the current scoping review also includes studies published since 2019, along with a special section on how culture and the arts have been experienced during the COVID-19 pandemic.

This scoping review is carried out within the framework of the CultureForHealth project and responds to the specific and well-defined criteria set out in the guidelines of the Preparatory Action – Bottom-Up Policy Development for Culture & Well-being in the EU, launched by the European Union (European Union, 2020). The CultureForHealth project aims to facilitate the exchange of knowledge, experience and success stories in the EU where they are related to the role of culture in well-being and health. Its various actions include a report with evidence and policy recommendations on the role of culture for well-being and health (presented in this document); a mapping of the most relevant existing practices<sup>1</sup>; a series of pilot projects; capacity building initiatives and a series of policy dialogues.

CultureForHealth is implemented by a consortium consisting of Culture Action Europe, Trans Europe Halles, Central Denmark Region, The Northern Dimension Partnership on Culture, Cluj Cultural Centre, and Društvo Asociacija. The project is co-funded by the European Union.

As our society faces severe challenges such as a mental health crisis exacerbated by the pandemic, an ageing population, growing inequalities, forceful displacement of people due to war and political conflict, and dynamic changes to work and the economy, new solutions and approaches are needed. The findings and recommendations in this report throw light on the pathways through which culture and the arts can support individuals and communities in adequately addressing these global challenges, thus identifying further avenues for future research and action.

---

<sup>1</sup> *The CultureForHealth Mapping of Initiatives on Culture, Health and Well-being is available online at <https://www.cultureforhealth.eu/mapping/>*

## How to navigate this report?

An Executive Summary is presented after the Introduction.

The Report Methodology chapter, presents the background, objectives and methodology.

Chapter Scoping Review Findings includes evidence from the reviewed studies under four thematic headings: (1) Culture and Health, (2) Culture and Subjective well-being, (3) Culture and Community Well-being and (4) Culture and COVID-19. Under each theme, evidence on the effects of cultural activities on well-being collected from scientific papers is presented, together with a table listing the included studies and their details. While Chapter Scoping Review Findings focuses on the outcomes of arts and culture activities, interventions and projects, Chapter Factors Influencing the Effectiveness of Interventions identifies some factors and pathways through which various forms of art or cultural engagement produce health- and well-being-related impact.

Chapter Discussion presents an overview of the scoping review and its key findings.

Chapter Policy Recommendations provides a series of broader and targeted policy recommendations, as well as a discussion on the relevance of culture for the specific health, social and economic challenges that Europe currently faces.

The final sections of the report include the list of References and three appendices to the scoping review protocol.



# **EXECUTIVE SUMMARY**

## Introduction

The aim of this report is to offer a broad overview of the existing evidence of the effect of arts and cultural activities on health and well-being. It provides an indication of the volume of existing literature, as well as highlighting the key concepts, focus points and types of evidence that exist. It also strives to identify the knowledge gaps and challenges identified in the existing literature, and provides policy recommendations for stakeholders in the cultural, health and social sectors, and decision makers at local, national and European level.

This report is carried out within the framework of the CultureForHealth project and responds to the criteria set out in the guidelines of the Preparatory Action – Bottom-Up Policy Development for Culture & Well-being in the EU, launched by the European Union (European Union, 2020). The CultureForHealth project aims to facilitate the exchange of knowledge, experience and success stories in the EU related to the role of culture in well-being and health. CultureForHealth is implemented by a consortium consisting of Culture Action Europe, Trans Europe Halles, Central Denmark Region, The Northern Dimension Partnership on Culture, Cluj Cultural Centre, and Društvo Asociacija. The project is co-funded by the European Union.

The report answers four research questions that were defined in the guidelines of the above-mentioned Preparatory Action (European Union, 2020), namely:

- (a) What evidence is there that participation in cultural activities improves the health and well-being of citizens?
- (b) Which specific forms of cultural participation appear to have a more positive impact?
- (c) Which policies in the field of culture might contribute, directly or indirectly, to maximising the benefits?
- (d) What synergies are necessary with other policy fields?

The report consists of two main parts: a Scoping Review addressing the first two research questions, and a Policy Recommendations section addressing the last two. The scoping review was carried out following the Joanna Briggs Institute (JBI) methodology for scoping reviews (Peters et al., 2015; Aromataris & Munn, 2020), and presents the health and well-being outcomes of arts and culture activities, interventions and projects. The Policy Recommendations provide a series of broader and targeted policy proposals, as well as a discussion about the relevance of culture for the specific health, social and economic challenges that Europe currently faces.

The scoping review takes stock of, and builds upon, the findings of the scoping review *What is the Evidence on the Role of the Arts in Improving Health and Well-being?* (Fancourt & Finn, 2019), published in 2019 by the World Health Organization (WHO). This review uses a similar approach in presenting the evidence on the contribution of the arts to health, adding the dimensions of subjective and community well-being to expand its perspective beyond health to the social and personal spheres. It also includes a special section on how culture and the arts have been mobilised to support health and well-being during the COVID-19 pandemic.



## Scoping review findings

### Why culture and well-being?

Arts and cultural activities are important in promoting the positive health and well-being of populations both individually and at a collective level. Our review has shown that the interdisciplinarity, accessibility and personal approach that arts-based and cultural activities involve can have significant benefits.

By incorporating arts-based approaches into healthcare and health policy, policymakers within the health and social care sectors are building on a strong and growing body of evidence. The research team responsible for the scoping review found 138 studies regarding the links between culture and health, 118 studies on culture and subjective well-being, 131 studies on culture and community well-being, and 12 studies on culture and positive COVID-19 outcomes. A total of 310 studies have been included in the scoping review, with some being relevant for more than one theme.

Both before ill health takes place (at the 'prevention and promotion' stage) and after (at the 'management and treatment' stage), arts and cultural approaches can have a role to play within health and social care and policy. This is not only as an add-on to existing medical treatment; cultural and arts-based methods can also prove effective as health-care responses in their own right.

### What is the evidence base?

The 310 studies used widely differing methodologies, and included meta-analyses, systematic reviews, scoping reviews, randomised controlled trials, non-randomised/quasi-experimental observational studies, mixed-methods studies, text and expert opinion papers, and qualitative studies. The table below divides the studies into the different major themes of cultural participation included. Some studies cut across categories and are counted in multiple areas:

Thematic chapter	N° of studies included	Active cultural participation	Receptive cultural participation	Active and receptive cultural participation
Culture and Health	138	105	16	16
Culture and Subjective well-being	118	93	13	12
Culture and Community well-being	131	103	17	11
Culture and COVID-19	12	5	3	4

## What kinds of cultural activities benefit health and well-being?

According to the theoretical model proposed by the WHO Report (Fancourt & Finn, 2019), arts activities can be viewed as complex or multimodal interventions, involving different types of engagement mechanisms that facilitate health and well-being outcomes. Arts activities can involve aesthetic engagement, imagination stimulation, sensory activation, cognitive stimulation, social interaction, physical activity or engagement with health- or well-being-related themes or settings. These components, usually a combination of several components, determine responses at psychological, physiological, social and behavioural levels, and thus mediate health and well-being outcomes (Fancourt & Finn, 2019).

Studies show that people can have health and well-being benefits both from engagement in arts and cultural activities as leisure, and from active enrolment in creative activities aimed at achieving specific health outcomes, such as cognitive stimulation, exercise and stress reduction. Though the latter treats art as a 'means to an end', the selection of specific artists and artworks in both scenarios is essential in creating an effective intervention.

Activities can be receptive (such as listening to music or watching visual artworks) or active (where participants are involved in the creative process) and still be effective. While some of the studies reviewed look at participation on a single occasion, most studies found that participating in the same activity multiple times is useful and effective. In either case, it is important that interventions are adapted to suit the needs and social conditions of participants.

Similarly, some studies look at individual cultural experiences, whereas most of them either involve participating in activities as a group or combining individual with group engagement. However, when facilitating group activities, it is important to be sensitive to issues that can arise due to the group dynamic, such as tensions due to differing individual preferences, timetabling issues and impacts on the group dynamic that can occur due to scheduling of group sessions.

There is also evidence that online interventions can be beneficial, though interactions between participants and accessibility for specific demographic groupings may make the use of online approaches difficult. Similarly, considerations should be given to urban design and the environment within which activities take place. Places that are green, active, pro-social and safe can promote well-being, while open public spaces can enhance a sense of relaxation; conversely, excessive noise may negatively influence people's mental states.

## What types of artistic intervention can be used?

There is a variety of different health-benefiting cultural activities, such as:

- **Music and singing:** to help alleviate stress and anxiety, and promote social engagement and connection
- **Drama and storytelling:** to aid social interaction, and to be used as a means of health promotion
- **Dance and movement:** to foster social engagement and physical functioning
- **Clown interventions:** to reduce anxiety and stress in hospitalised patients
- **Reading and writing:** to enable the finding of meaning and reduction of risk behaviours
- **Photography and film:** for stress-reduction, self-reflection and self-expression
- **Visual arts:** to reduce feelings of loneliness and isolation, to promote the finding of meaning and generate a positive therapeutic environment
- **Architecture and design:** to improve perceptions of healthcare environments and overall well-being
- **Heritage sites and museum visits:** can play an important social role for health promotion, well-being and social inclusion
- **Multiple art forms:** can be provided in the same setting, so that individuals can choose the most suitable and therapeutic forms of expression for their needs.

## What are the positive impacts of art-based interventions?

The evidence points towards associations between art-related cultural activities and positive health outcomes including: improvements to quality of life; general and psychological well-being; increased social engagement; reduction in experiences of depression and anxiety; improved health-related quality of life in patients with chronic health conditions; prevention of cognitive decline in older adults; and the development of cognitive, emotional and social skills.

As the above suggests, studies were gathered on a range of topics that covered a broad spectrum of health and well-being-related issues, ranging from inclusion of disadvantaged groups and improved empathy and finding of meaning, to improved perceptions of the healthcare environment and physical, psychological and social benefits for those with chronic obstructive pulmonary diseases.

Most studies included in this scoping review refer to art-based interventions in which participants were actively involved in the creative process.

The table below summarises the categories of health and well-being outcomes associated with arts and cultural participation identified by the scoping review:

### 1. Culture and health

#### a. Prevention and Promotion

Healthy living and health-promoting behaviours  
Health communication  
Prevention of ill health  
Maternal mental health and mother-infant bonding  
Care-giving

#### B. Management and Treatment

Mental health conditions  
Neurodevelopmental and neurological disorders  
Noncommunicable diseases  
Acute conditions

### 2. Culture and subjective well-being

#### A. Personal Fulfilment and Engagement

Acquiring and developing skills  
Self-expression  
Empowerment  
Increased social engagement, bonding and inclusion  
Sense of identity and belonging

#### B. Personal Orientation

Resilience  
Positive behaviours  
Empathy  
Confidence and Self-Value

#### C. Experiences of Emotions

Improved mood  
Positive emotions  
Emotional regulation  
Reduced anxiety and depression  
Reduced stress, improved relaxation and flow  
Bereavement support

#### D. Personal Evaluations of Life

Improved well-being and quality of life  
Life satisfaction and motivation  
Finding of meaning  
Improved knowledge and reflectivity

### 3. Culture and community well-being

#### A. Social Inclusion

Social bonding and inclusion  
Inclusion of disadvantaged groups  
Increasing social engagement and reducing isolation  
Reducing stigma  
Well-being and inclusion of refugees

#### B. School- and Work-related Well-being

School-related well-being  
Work-related well-being

#### C. Local development

Well-being and quality of life  
Active citizenship  
City cultural profile and well-being

#### D. Built Environment and Well-being

Built heritage  
Environmental design in healthcare  
Public space design

### 4. Culture and Covid-19

Creative activities as preferred leisure  
Innovative strategies to cope with challenges  
Resilience  
Reducing stress and short-term anxiety  
Delivery of public health information  
Counteract negative effects of social isolation

In the area of Culture and Health, the evidence shows that participation in cultural activities can help with health promotion and the prevention of illness, as well as the management and treatment of conditions.

- The overall findings show significant associations between participation in creative activities and art therapies, and improved health-related quality of life in patients with chronic health conditions.
- Elderly people involved in arts-related activities may benefit from increased social engagement, decreased anxiety and depression, and improved functioning.
- Certain cultural activities help with the prevention of further cognitive decline and ageing support for older adults with cognitive impairments.
- Singing is found to bring physical, psychological and social benefits for people with chronic obstructive pulmonary diseases, and to improve maternal emotional states and mother-infant bonding.
- Listening to pre-recorded music before surgery helped reducing pre-operative anxiety, while music interventions were reported to have beneficial effects for patients in the recovery period after surgery.
- Art and environmental design in mental health care units may improve the well-being of patients and staff, and the perceptions of the healthcare environment.

In terms of Personal/Subjective Well-being, studies in the scoping review found that involvement with the arts is associated, among other benefits, with higher life satisfaction, reduced anxiety and depression levels, improved mood and emotional regulation, increased confidence and self-valuing, and an improved sense of belonging in adults and older individuals. In particular, reading enables the development of empathy and the finding of meaning, while watching visual artworks may help with stress reduction. Community singing can help with the social integration of older adults and music/singing promote development of resilience in adults.

Arts and culture activities may contribute to Community Well-being at different levels by positively impacting social relations, school- and work-related processes, built environments and citizens' active engagement.

- Evidence from the scoping review found significant associations between peoples' active participation in cultural activities, and increased social inclusion and bonding. Such interventions mainly target vulnerable groups and people at risk of exclusion, such as people with disabilities, minority groups, people living in poverty, people in rehabilitation and people with various health conditions.
- Museums, libraries and other cultural venues can play a key role in enabling access to culture, and to a range of social and health services for such groups.
- A series of well-being outcomes are related to the school environment or have the potential to support educational development and social inclusion within the school context. They include stress reduction, development of cognitive, emotional and social skills, and the reduction of risk behaviours.
- Creative and social skills are increasingly required by the current labour market, while work relations and organisational structures highly depend on individual well-being and the collective capacity to adapt to fast-changing realities. Evidence shows that involvement with the arts may reduce stress, help with the management of burnout symptoms, increase creative and collaborative skills, and enable the development of resilience.
- Public space design impacts individual and community well-being. Places that are green, active, pro-social and safe may enhance social participation and positive emotions.

Arts have supported people's well-being during the COVID-19 pandemic both broadly, through delivery of public health information, and at the individual level, through engagement with the arts and creative activities. At the individual level, creative activities were people's preferred leisure activity during lockdown and self-isolation. They benefited mental health by reducing stress and short-term anxiety, and supporting emotional regulation and the development of resilience. Most notably, engaging with creative activities helped people develop innovative strategies to cope with challenges.

## Policy recommendations

### Which policies maximise the benefits of cultural activities in improving the health and well-being of citizens?

Building on the scoping review, policy considerations have been made about what is required of, or can assist, actors involved in the studies and the links between the culture, health and well-being sectors.

#### Actors:

- Recognise and engage with the knowledge held by an emerging community of practice linking cultural and health actors with other relevant stakeholders that are connected by a community of care approach.
- All citizens could benefit from cultural approaches to health and well-being (and thus become their end beneficiaries), but there is also value in adopting cultural practices targeted at specific groups – namely vulnerable ones.
- Political-administrative authorities can support or facilitate programmes in this space. If authorities enable bottom-up experimentation and network building and, simultaneously, provide strategic guidance and other forms of support, this will enable cultural activities to achieve their full health and well-being potential.

#### What works?

- Cultural activities can support before ill health takes place (at the 'prevention and promotion' stage) and after (at the 'management and treatment' stage). Such activities can also help with removing social and cultural barriers that impede prevention and treatment. Thus, a holistic approach is offered by cultural activities, as they help shift the focus away from specific illnesses to a broader understanding of health. In so doing, culture supports health and well-being at the individual level (supporting physical and mental health, and subjective well-being), at the community level (supporting social inclusion and engaged, resilient communities), and at the economic level, resulting in what the OECD (2019) describes as an economy of well-being (that is, reinforcing social stability and economic prosperity, and thus supporting continued investments in culture, leading to a "virtuous circle", where each advancement benefits the next).
- Cultural participation also can reinforce active health citizenship. It can help support patients in developing their own health strategies, stimulating conversations around different medical options and strengthening the relations between citizens and health policymakers.

#### What could work better?

- Culture and health activities and policies should pay attention to untapped overlaps between the culture and health sectors. Cultural activities can be incorporated into health policy in multiple ways, such as in routine medical care, as auxiliary treatment, supporting preventive action and supporting individuals' abilities to manage their own health.
- There is a need for further opportunities for research, education and training, and collaboration.

The review also makes clear that a piecemeal approach to this topic is unlikely to be sufficient to maximise the full benefits of culture for health and well-being across the European continent. Rather, the linkages between these disciplines have the potential to result in a new interdisciplinary field of knowledge and practice, the emergence of which reflects broader and parallel shifts in discussions regarding health and culture. An explicit engagement with health promotion and prevention reinforces the broader role of culture in society, and empowers it to take a crucial role in promoting just, equal and sustainable societies.

Supporting this overlap could also contribute to reinforcing the cultural field, giving new opportunities to the sector

as a whole (by encouraging capacity-building activities, new sources of income and funding and, more broadly, by creating an environment that is supportive of experimentation). It also provides opportunities for artists and cultural operators to expand their skills and fields of work. This would reinforce the currently fragile cultural ecosystem, and continue to add to the ongoing expansion of artistic and cultural practices towards cross-sectorial cooperation.

Combining recommendations from the literature with learnings gained from existing policies and initiatives, the CultureForHealth team makes several policy suggestions, which are itemised below.

## What policy measures are proposed?

Unleashing the potential health and well-being benefits of culture across the European Union requires concerted action that can be grouped under the following four headings:

- 1. Dedicated strategic and financial support**
- 2. Knowledge and awareness building**
- 3. Training and peer learning**
- 4. Localising culture, health and well-being R&D and policy discussions**

### Dedicated strategic and financial support

**1.1 Include culture as an integral part of the EU's health strategy and as a core pillar of its upcoming mental health strategy.** The approach shall be comprehensive, holistic, focusing on long-term health promotion and disease prevention and shall address health inequalities.

**1.2 Increase investment in prevention and health promotion.** If cultural activities can prevent disease and support individual and community well-being, they are likely to contribute to long-term health-budget savings. Cultural activities are also a **cost-effective** way to support more equal access to health and broader efforts targeting the social determinants of health. They should be based on the combined resources of three different major budgets (health, culture and social care), be consistent with the timeframe required to achieve the potential benefits and ensure fair remuneration of all actors involved.

**1.3 Embed dedicated provisions** that recognise the health and well-being benefits of cultural activities **in policy documents** at the European, national, regional and local level.

**1.4 Promote the use of culture-based social prescribing<sup>2</sup> across the EU.**

### Knowledge and awareness building

**2.1 Recognise cultural activities as complementary to traditional medical responses** to both ill health and its prevention, the multiple dimensions that connect culture to health and well-being, and, in particular, culture's contribution to the economy of well-being<sup>3</sup>. Strive for equal-level cooperation between the cultural, health and other stakeholders involved in the design and implementation of these activities.

**2.2 Support further research** in the field of culture for health and well-being, with particular emphasis on advancing the knowledge of the impact factors and mechanisms, to enable maximisation of the benefits of culture in this context. Increase the number of large-scale, large sample, cross-country research initiatives. More research is also needed into the health and well-being effects of digital participation in cultural activities.

**2.3 Raise awareness of the evidence** regarding the health and well-being benefits of cultural activities and, more broadly, of the **cost effectiveness** of supporting a more comprehensive, equal and long-term approach to health policy across the EU.

<sup>2</sup> The World Health Organization defines social prescribing as 'a means of connecting patients to a range of non-clinical services in the community to improve their health and well-being. It builds on the evidence that addressing social determinants of health such as socioeconomic status, social inclusion, housing and education is key to improving health outcomes WHO (2022b).'

<sup>3</sup> The OECD refers to the economy of well-being as 'the capacity to create a virtuous circle in which citizens' well-being drives economic prosperity, stability and resilience, and vice-versa, that those good macroeconomic outcomes allow to sustain well-being investments over time (OECD, 2019).'

## Training and peer learning

3.1 **Develop curricula and encourage joint training, as well as life-long learning** involving culture, social and health stakeholders **on an equal level, in culture for health and well-being** for: a) university students in the cultural, artistic, medical and social areas; b) established practitioners and professionals; and c) capacity building on an institutional level (e.g., in museums, theatres, or health or care centres).

3.2 **Support the development of training** that encompasses mechanisms to **take care of the mental health and well-being of actors involved** in the implementation of cultural activities. In the sensitive environment of healthcare, caregivers, artists, cultural managers and other stakeholders can face challenging situations<sup>4</sup>. **Enable and financially support peer learning and the exchange of good practice guidelines** on the topic across borders and sectors.

## Localising culture, health and well-being R&D and policy discussions

4.1 Support the **creation of a dedicated platform** enabling policy discussions and exchange of knowledge on culture, health, and well-being. In the short-term, this platform could be driven by EU Member States (for example, in the context of the Work Plan for Culture 2023–2026) or, alternatively, by a think tank or a university. In the mid-term, it could be **embedded in an already existing EU-level health organisation, agency, or other structure**. In the long-term, the interdisciplinarity of the culture, health and well-being fields would justify the creation of an independent organisation dedicated to advancing the field through R&D, cross-border peer learning, training, capacity building and policy recommendations, which could take the form of a **Centre for European Culture, Health and Well-being**.

4.2 **Encourage Member States, regions, cities and organisations** to establish **their own culture for health and well-being strategies, and to assign dedicated finance and personnel** to the promotion of integrated culture and health policies and interventions. Embed these actions in the work of local health, cultural and social institutions. Such strategies should recognise that change takes time, and thus prioritise the goal of their long-term impact.

In addition, the CultureForHealth team has identified **eight challenges faced by the EU** connected to this area, for which new approaches are needed. The section below presents evidence from the scoping review and recommendations tailored to each challenge. These recommendations should be seen as illustrative rather than exhaustive, and need further development by experts, practitioners and policymakers.

<sup>4</sup> This is echoed by the European Care Strategy's statement that 'providing care has major consequences for informal carers, including negative effects [...] on their mental health (European Commission, 2022a).'



## CHALLENGE 1: The need for an increased focus on health promotion and disease prevention



### About the challenge

The importance of health promotion and prevention in supporting health throughout life is widely known. However, in the EU, public and private expenditure on preventive care accounted for only 2.8 per cent of total health expenditure in 2018 on average, with the highest shares recorded in Italy (4.4 per cent) and Finland (4 per cent) [5]. The tension between existing knowledge on the one hand and investment patterns on the other becomes stronger when one considers the research suggesting that focusing on health promotion and prevention is a highly cost-effective investment [11].

Additionally, taking into account the social determinants of health, focusing on health promotion and prevention could also potentially pre-empt the reinforcement of health inequalities – see the challenge entitled ‘The association between ill health and patterns of inequality’ for more.

### Examples of evidence from the scoping review

Engaging with the arts can help prevent ill health; for instance, through improving respiratory, cardiovascular and cognitive function through singing.

Cultural participation can be used to support healthy living and health-promoting behaviours. Some studies confirmed positive associations between participation in cultural activities and good health in adults, and between an adolescent’s creative engagement and the promo-

tion of healthy lifestyles.

Arts can enable health communication by increasing the awareness of and understanding of various health conditions (e.g., via theatre) and improving communication between medical staff and patients (e.g., by drawing).

The arts can have a positive health impact by affecting the social determinants of health, such as promoting social inclusion, reducing stigma, addressing inequalities and encouraging active participation in community life.

### Tailored recommendations

As the policy recommendations highlighted, unleashing the potential health and well-being benefits of cultural activities requires combined action across four areas: dedicated support, knowledge and awareness building, training and peer learning, and infrastructure building. This extends to the challenges summarised in this section.

This challenge could be addressed by recognising the health benefits of culture and thus increasing the spending on mixed-methods approaches, such as activities with potential benefits in terms of prevention and health promotion, based on the combined efforts of health, culture, social care and other budgets.

In this context, one could also consider using arts and culture for health communication and increased public engagement during the development of health policies.



## CHALLENGE 2: A growing mental health crisis



### About the challenge

More than 85 million citizens in the EU were affected by mental health problems before the COVID-19 pandemic [3]. This situation has only been exacerbated by the spread of the virus and the methods of its control, particularly among the young, those with precarious employment, lower incomes or less education. There has been a notable increase in burnout, anxiety and depression. At the same time, the resulting workload and drain on health professionals has led to an increase in the levels of anxiety and depression compared to workers in other sectors [3]. This mental health crisis is exacerbated by a series of indirect and direct reasons, including the pandemic, climate anxiety, war, and economic and energy crises.

### Examples of evidence from the scoping review

- Promotion and prevention:

Participation in receptive and creative cultural activities is associated with good health, good satisfaction with life, and low anxiety and depression scores.

Creative activities addressing mental health delivered in community settings facilitate young people with such problems to seek out and access health services.

- Management and treatment:

Active engagement with a variety of creative activities such as singing, dancing, creative writing, drama, visual arts and crafts can benefit individuals with mental health

problems through reduced anxiety and depression, improved emotion regulation strategies, increased experience of positive emotions, well-being, and improved self-acceptance and identity in relation to being mentally ill.

### Tailored recommendations

This challenge could be addressed by funding cultural activities with potential benefits in this context by supporting cross-sector partnerships to widen access to these activities, and by enabling further research in the field of culture for mental health and well-being. While doing so, it is important to develop mechanisms to take care of the mental health and well-being of actors involved in the implementation of cultural activities.

## CHALLENGE 3: The need to support the broader health and well-being of young people



### About the challenge

Around the world, suicide is the 'fifth most prevalent cause of death for adolescent boys and girls aged 10–19; for adolescents 15–19, it is the fourth most common cause of death, after road injury, tuberculosis and interpersonal violence' [12]. Additionally, in Croatia, there were 57.1 per cent more suicides in 2020 in this age group, 70 per cent of all suicides in Bulgaria are among young people, while self-harm and suicide attempts by Italian teenagers increased by 30 per cent between the autumn of 2020 and spring of 2021 [13].

The WHO notes that young people 'face many pressures and challenges, including growing academic expectations, changing social relationships with family and peers and the physical and emotional changes associated with maturation [...] Behaviours established during this transition period can continue into adulthood' [14]. Supporting the health of young people at such a crucial moment of their lives can also be seen as an investment in the future health and well-being of our societies.

### Examples of evidence from the scoping review

Active engagement with art can support emotional regulation in early age children and schoolchildren. There were positive associations between an adolescent's creative engagement and the promotion of healthy lifestyles, such as engaging in physical activity and the reduction of risk behaviours.

Cultural participation may lead to the development of creative skills, contributing to the personal and educational development of children and youth, as well potentially improving life skills such as empathy, decision-making, resilience, communication and collaboration.

### Tailored recommendations

This challenge could be addressed by promoting cultural activities tailored to this specific age group and making them available through cultural, educational, social and health settings, ensuring that youths from underprivileged communities have access to these activities.

The use of culture-based social prescribing could also help to address this challenge. More broadly, as with some of the other challenges, supporting the health and well-being of young people would be facilitated by the recognition that cultural activities are complementary to traditional medical responses to both ill health and its prevention.



## CHALLENGE 4: Ongoing changes to labour markets, patterns of work and the economy



### About the challenge

The impact of automation on occupational categories is likely to be differentiated [15]. This might be accompanied by increased flexibility in working patterns. Simultaneously, the transition to the green economy will require changes towards different ways of living. To face this challenge, it is important to strengthen critical thinking and the capability of dealing with complex challenges in a transversal way. Schools have an important role to play by providing widespread access to artistic education and cultural activities.

This echoes statements by organisations such as the World Economic Forum regarding the importance of creativity as a skill in the future [16].

### Examples of evidence from the scoping review

Students and professionals participating in creative activities can benefit from personal growth and development of creative and collaboration skills. They may also acquire new abilities and strategies to cope with stressful experiences and combat burnout, and to improve their resilience. Involvement with the arts can help reduce stress and increase motivation, energy and job satisfaction.

Arts and crafts can be used as occupational therapy during rehabilitation and leisure pastimes for ill or older

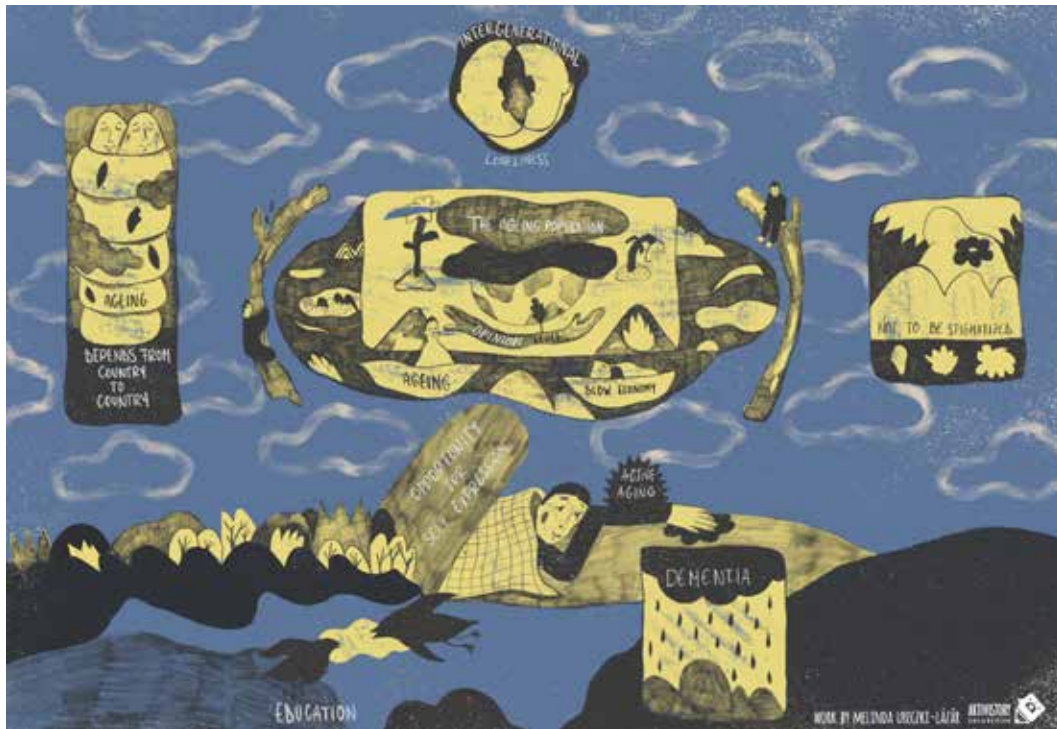
people who are not active in the labour market.

### Tailored recommendations

This challenge could also be addressed by promoting cultural activities and making them available through education, training, in the workplace, during rehabilitation and in other appropriate settings.

The cross-sectoral work required to address this challenge reinforces the need to encourage Member States to establish their own culture for health and well-being strategies, and to assign dedicated finance and personnel to the promotion of integrated culture and health policies and interventions.

## CHALLENGE 5: An ageing population



### About the challenge

Unless growing older healthily is well promoted, an ageing population will by default decrease the percentage of fit and robust members of the workforce, increase the need for long-term care and health expenditure, and slow economic growth. The potential number of people across the European Union in need of long-term care is expected to rise from about 30.8 million in 2019 to 33.7 million in 2030, rising to 38.1 million in 2050, which corresponds to an overall increase of 23.5 per cent [17]. People who are isolated and lonely have a 50 per cent greater risk of dying earlier than those who are connected; they also have higher rates of stress, anxiety, depression and cognitive decline. Isolation increases the risk of dementia with 64 per cent [18]. The number of people with dementia is set to double by 2050 [19]. Healthy ageing can be promoted by the coordination of health, long-term care and other services, as well as the promotion of healthy lifestyles [20].

### Examples of evidence from the scoping review

Elderly people's active engagement with the arts can have positive effects on their health and well-being. It may enable a decrease in anxiety and depression, as the result of improved physical, intra-personal, cultural, cognitive and social factors.

Activities like singing and dancing can positively affect the cognitive functions of elderly people, and have been used in the management of neurodegenerative diseases

with positive results.

Both receptive and active forms of cultural participation can be successful in increasing social engagement and reducing isolation among elderly people.

### Tailored recommendations

This challenge could be addressed by promoting cultural activities tailored to this specific age group, making them available in care and community settings, and supporting cultural venues such as museums, libraries and art centres to programme dedicated activities involving the active engagement of elderly people. These actions are cost-effective investments that can potentially enable a longer period of active ageing, alleviating pressure on relatives and unpaid caregivers, and delaying the need for more costly long-term care.

The use of culture-based social prescribing could also help address this challenge.

More broadly, health and care practitioners and professionals would be more likely to support the above suggestions if they encountered curricula dedicated to the health and well-being benefits of culture during their education and training. This underlines the need to develop specialised modules for such courses.

## CHALLENGE 6: The association between ill health and patterns of inequality



### About the challenge

According to the WHO, 90 per cent of health inequalities can be explained by five factors: quality of healthcare; financial insecurity; poor quality housing and neighbourhood environment; social exclusion; and the lack of decent work and poor working conditions [21]. That is the social determinants of health [22] have a bigger impact on health promotion than individual lifestyle risk factors.

### Examples of evidence from the scoping review

Cultural participation has been found to increase knowledge and awareness of various health conditions among underserved communities, and to provide support networks for disadvantaged individuals suffering from illness.

Social inclusion can be facilitated by active participation in art activities. Cultural venues such as theatres and museums can be an entry point for social services and a source of community for the socially excluded.

### Tailored recommendations

This challenge could be addressed across the EU with dedicated research and development targeting the links between ill health, patterns of inequality and cultural interventions. These efforts could be led by a dedicated team; e.g., the research and policy staff of a Centre for European Culture, Health and Well-being.

Supporting further research in the field of culture for health and well-being – that is, to advance knowledge of the benefits of cultural interventions to address and prevent the reinforcement of health inequities – could also provide a robust response to this challenge. That said, it is important to highlight that, while cultural activities can support broader efforts targeting the social determinants of health, such activities cannot address health inequity or its health consequences on their own.



## CHALLENGE 7: Promoting active citizenship



### About the challenge

The simultaneous phenomena of apathy and political polarisation require an expanding awareness of participatory tools. Empowering people in all walks of life is crucial to actively engage them in making decisions about their lives and future. This is likely to support individual and collective adaptability and resilience [23] in the context of a changing world. Cultural spaces could offer opportunities for communities to meet, discuss and act.

### Examples of evidence from the scoping review

Participatory arts projects can enable community well-being and resilience, foster leadership skills and encourage people to take up new roles and responsibilities in their communities.

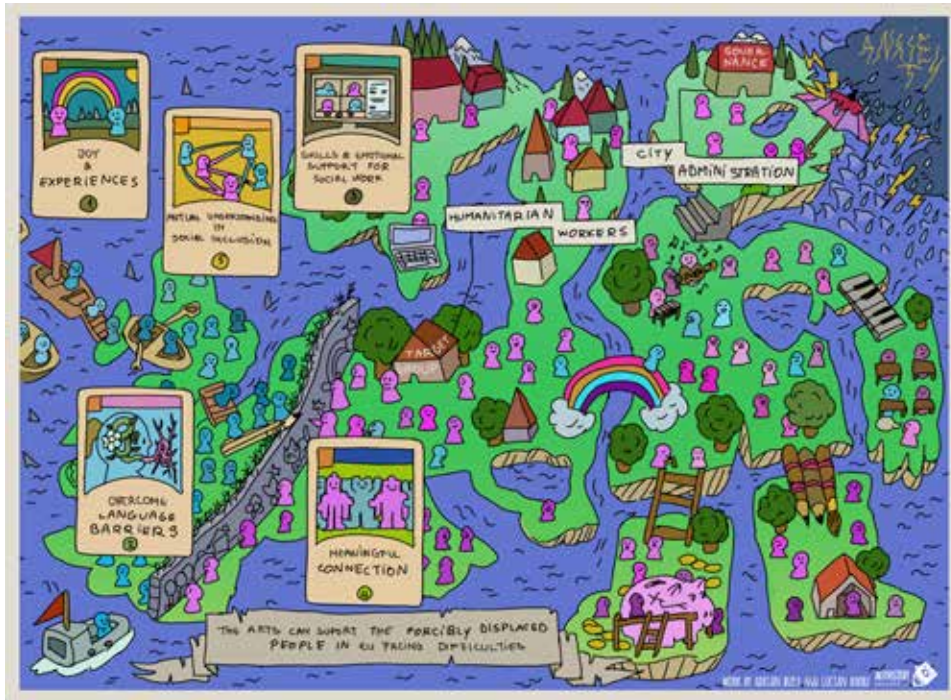
During the COVID-19 pandemic, people engaged in creative activities were able to develop innovative and constructive strategies to deal with the associated challenges and uncertainties that arose in lockdown.

### Tailored recommendations

This challenge could be addressed by promoting participatory arts projects and other cultural activities tailored to this goal.

Additionally, it will be necessary to raise awareness of the evidence-based health and well-being benefits of cultural interventions among those who manage cultural spaces.

## CHALLENGE 8: Difficulties faced by forcibly displaced people in the EU



### About the challenge

As a WHO paper highlights, displaced people experience significant loss, physical hardships and other stressors that often result in psychological distress [24]. By promoting social inclusion, social cohesion, social acceptance and belonging, arts activities can support psychological, behavioural and community processes that are linked to improved mental well-being.

### Examples of evidence from the scoping review

Engagement in community arts can contribute to an increased quality of life and enjoyment of life, as well as a sense of community and belonging for new refugees and asylum seekers. Through cultural activities, young migrants and refugees can benefit from their liberation from disempowering identities and the redefining of relationships.

Investment in the arts means investment in improving social integration and cohesion, and can contribute to mental well-being for all.

Organising arts and cultural activities for displaced people and their host community can help support coping, and promote recovery and integration.

Cultural and community assets can play an important role in supporting the health and well-being of forcibly displaced people.

Artistic methods and practices can contribute to skill-building among those involved in humanitarian responses. Integrating artistic methods into mental health

awareness-raising and other types of training can help to improve active listening, cultural competence and diversity sensitivity.

### Tailored recommendations

This challenge could be addressed by the recommendations outlined in the WHO publication titled 'Arts and Health: Supporting the Mental Well-being of Forcibly Displaced People' [24].

'1. Supporting arts, arts therapies and cultural activities can benefit the mental health and wellbeing of all people, whether they are forcibly displaced or members of host communities.

'2. Arts and cultural activities can form an important part of an organised mental health and psychosocial support response [...]. Incorporate artist led initiatives, arts therapies and arts interventions into the response.

'3. People working in museums, libraries, performance venues, cultural centres, heritage sites and other cultural spaces, should consider how their venues can support forcibly displaced people; e.g., by showcasing their art, creating community theatre plays, organising musical events and concerts, or developing relevant educational activities.

'4. In humanitarian responders, [active listening, cultural competence and diversity sensitivity] skills [brought about through artistic methods and practices] can greatly contribute to community empowerment and participation.'

# **REPORT METHODOLOGY**



# Scoping Review Protocol

## Scoping Review Objectives

This scoping review aims to map the literature in the field of culture, well-being and health to inform policy recommendations for Europe. The objectives and the research questions have been defined by the guidelines of the Preparatory Action – Bottom-Up Policy Development for Culture & Well-being in the EU (European Union, 2020).

The objectives of the scoping review are:

1. to provide a structured argument for explaining the key relevance of culture for health and well-being to policy-makers at EU and national levels;
2. to identify the key dimensions of the topic and the key challenges in the field;
3. to summarise existing knowledge and evidence from the most relevant research;
4. to provide recommendations (both broad policy directions and specific policy and targeted investment measures) based on the findings of the scoping review.

## Scoping review questions

The main research questions were:

- a. What evidence is there that participation in cultural activities improves the health and well-being of citizens?
- b. Which specific forms of cultural participation appear to have a more positive impact?
- c. Which policies in the field of culture might contribute, directly or indirectly, to maximising the benefits?
- d. What synergies are necessary with other policy fields?

## Eligibility criteria

**Participants:** There are no restrictions on participants in terms of socio-demographics.

## Topics

The scoping review covers four main topics:

1. **Culture and health outcomes**, which corroborates the findings from the extensive scoping review published by the WHO in 2019 (Fancourt & Finn, 2019);
2. **Culture and subjective well-being**, which integrates a conceptualisation of well-being from the perspective of four theories: fulfilment and engagement, personal orientation, evaluative and emotional (Das et al., 2020);
3. **Culture and community well-being**, where community well-being is operationalised to include the work and living environments, as well as urban development (Cohen, 2017; Rautio et al., 2018);
4. **Culture and COVID-19**, which focuses on how culture contributes to alleviating the direct and indirect negative effects of the COVID-19 pandemic.

## Types of Sources

There have been no restrictions based on study design for the records included in this scoping review. However, special attention has been given to meta-analyses, meta-syntheses and existing scoping reviews. We included both quantitative and qualitative studies. In terms of quantitative studies, this scoping review has considered both experimental and quasi-experimental study designs (that is, randomised controlled trials, non-randomised controlled trials, and pre and post studies), analytical observational studies (that is, cross-sectional studies), and descriptive observational studies (that is, individual case reports). Regarding qualitative studies, we included case studies, action research and ethnographic research. Grey literature such as text, opinion and position papers, policy papers and other projects have also been considered for inclusion in this scoping review.

## Scoping Review Methodology

The proposed scoping review has been conducted following the JBI methodology for scoping reviews (Peters et al., 2015).

### Search strategy

The databases used to search for sources were PubMed and Scopus.

The review strategy was aimed at locating published studies and reports, as well as grey literature, by searching the reference lists of included records and additional relevant records, and by obtaining recommendations from Advisory Board members. An initial limited search of PubMed and Scopus was undertaken to identify articles on the topic of the impact of cultural participation on health outcomes, subjective well-being, community well-being and COVID-19 outcomes. The concept of subjective well-being has been operationalised based on the theoretical foundations of subjective well-being described elsewhere (Das et al., 2020). Other systematic reviews and meta-analyses were used to inform the key words and search strategy for the other topics within this scoping review: community well-being (Cohen, 2017; Rautio et al., 2018), cultural activities (Warran et al., 2021) and COVID-19 (Michelen et al., 2021). The titles and abstracts of relevant articles have been used to develop a full search strategy (see Appendix II). The search strategy, including all identified keywords, has been adapted for each database included in the review. Studies published in English have been included for the literature published in PubMed and Scopus.

Studies published between 2005 and November 2021 have been searched for the scoping review. The year 2005 was selected as a limit by the project team, since it can be associated with the emergence of a more complex perspective on culture, related to sustainable development. This is marked, among others, by the adoption of the Convention for the Protection and Promotion of the Diversity of Cultural Expressions (UNESCO, 2005) and by the European Council's Workplan for Culture 2005/2006, leading to the European Agenda on Culture in a Globalising World (European Union, 2007a).

### Limitations

In preparing this report the project team has followed a widely used methodology for scoping reviews, the JBI methodology (Peters et al., 2015), and the latest methodological guidelines (Peters et al., 2021) in conducting scoping reviews. For example, stakeholder engagement and input were essential in the validation of the scoping protocol and in improving intermediary versions of this report. Yet, some critics and limitations might be stated against this report, and these are approached and explained in detail below.

#### Scoping review vs systematic review

First, the decision to conduct a scoping review rather than a systematic review on the topic of culture and health was guided by the nature of questions set out in the guidelines of the Preparatory Action – Bottom-Up Policy Development for Culture & Well-being in the EU, launched by the European Union (European Union, 2020), namely: (a) What evidence is there that participation in cultural activities improves the health and well-being of citizens? (b) Which specific forms of cultural participation appear to have a more positive impact? (c) Which policies in the field of culture might contribute, directly or indirectly, to maximising the benefits? (d) What synergies are necessary with other policy fields? These are typical scoping review research questions and do not meet the stricter requirements of systematic review research questions that should be more clear and focused, as well as developed using different techniques such as PICO (population, intervention, comparison, outcome), SPIDER (sample, phenomenon of interest, design, evaluation, research type), SPICE (setting, perspective, intervention, comparison, evaluation), or ECLIPSE (expectation, client, location, impact, professionals, service) (Richardson et al., 1995; Cleyle & Booth, 2006; Cooke & Booth, 2012; Wildridge & Bell, 2002). Therefore, after a careful consideration of scoping and systematic review methodologies, a scoping review methodology was proposed in order to respond to the requirements set out in the call for proposals. A systematic review would have been appropriate in the situation in which the questions set out by the call for proposals would have been more focused (i.e., on a specific type of cultural participation, a specific health outcome, etc).

Second, although systematic reviews are preferred to provide evidence for policy development as opposed to scoping reviews, especially when questions of feasibility, effectiveness, and appropriateness of various interventions are put forward, scoping reviews may also be used to inform policies around priorities for research, gaps in current research, or map available evidence on a specific topic. Moreover, the report proposes broader recommendations on

how institutions and local and national authorities can take up culture in their agendas targeted to improving populations' health and well-being, it does not propose policy measures related to specific forms of intervention.

### **Lack of methodological assessment of the quality of studies included in the scoping review**

Scoping reviews differ from systematic reviews in several ways, including in that they aim to provide an overview of the existing evidence in a specific field, regardless of its quality, as opposed to systematic reviews. In other words, rather than attempting to identify the best available evidence, scoping reviews aim to map what evidence has been produced in a particular field of research (Peters et al., 2015). This is particularly in line with the focus of the current scoping review, which strives to map the literature in the field of culture. It is beyond the scope of this type of review, and hence of the current scoping review, to examine the methodological quality of the included studies. In addition, the implementation of a method for assessing the methodological quality of the studies would have been impossible due to the enormous heterogeneity of the research work included in this report and summing up over 300 records.

### **Search strategy**

A structural limitation of this scoping review is related to the fact that its search strategy included only two databases and that it considered literature available in English exclusively. Given the fact that health and well-being are very broad concepts that are defined in different ways by various sources, our search terms may not have covered all the possible valuable aspects of our focus theme very accurately. Even with this limitation in mind, the 310 records included in this report offer an important overview of the current research in the field of culture and health.

### **The negative impact of engagement in arts and culture**

Although this scoping review's methodology sets out to identify and report on the potential negative impact of engagement in arts and culture (refer to Appendix III: Data extraction form, section 3.7), these accounts are largely missing from the current published literature on this topic. Such accounts found in the included records are listed in the column 'Comments, limits, negative outcomes' of the tables under each of the four thematic headings of the scoping review. This is in line with current positive publication bias present in many fields of research (Mlinaric et al., 2017).

Despite these limitations, the current scoping review provides important insights into the characteristics of the body of evidence from the culture and health field, the main topics approached in this research, and highlights knowledge gaps in this area.

## Study or Source of Evidence Selection

After the search was completed, all identified records were collated and uploaded into the free literature collation web tool CADIMA, and duplicates were removed. Following a two-stage eligibility assessment process, three independent reviewers (M.D.D., D.Y. and O.P.) screened the titles and abstracts of uploaded records, and followed this with a full-text screening of records found eligible in the first stage. Each record was screened by a reviewer against the eligibility criteria in the first and second stages of assessment. The scoping review team organised regular meetings with the reviewers to discuss the inclusion or exclusion of records for which they needed a second opinion regarding their status.

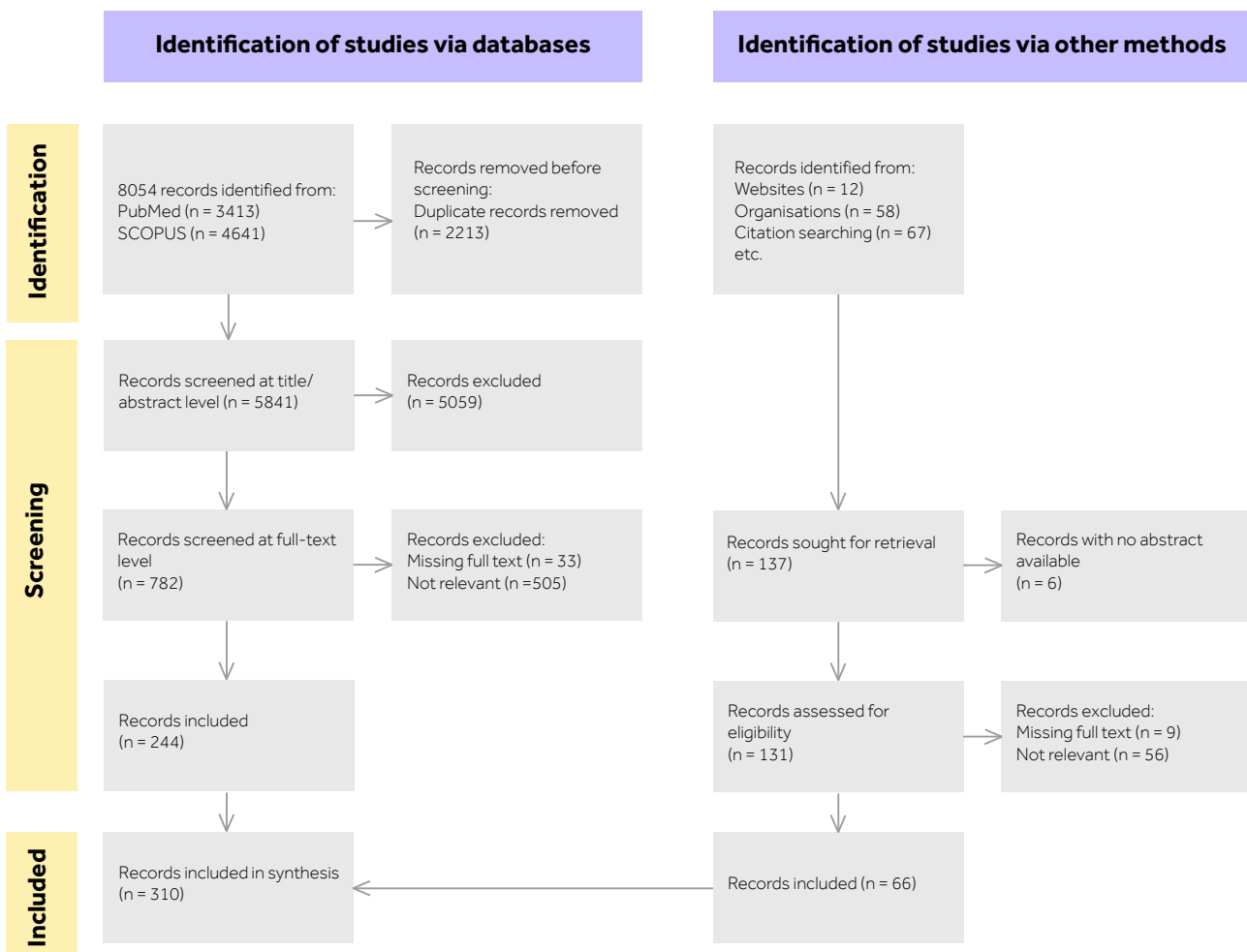
Records were included if their abstracts:

1. described empirical research conducted on humans and focusing on culture or the arts to improve health outcomes, subjective well-being, community well-being or COVID-19 outcomes;
2. described theoretical frameworks, concepts and tools that explained the pathways through which culture could potentially contribute to improved health outcomes, subjective well-being, community well-being or COVID-19 outcomes;
3. described any benefits of participation in cultural or art-based activities.

Records were excluded if they did not have an abstract to assess.

The results of the search and the study inclusion process have been presented in an adapted version of the Preferred Reporting Items for Systematic Reviews and Meta-analyses extension for scoping review (PRISMA-ScR) flow diagram (Tricco et al., 2018).

Figure 1 – PRISMA Flow Diagram



## Data Extraction

Data was extracted from the included papers by the reviewers using a data extraction tool developed by the scoping review team (see Appendix III: Data extraction form).

The data extracted included specific details about the type of study design (i.e., meta-analysis of systematic review, randomised controlled trial, observational study, qualitative study, text/expert opinion paper, policy report), participants (description and number), context (i.e., art institution or centre, social or community centre, health institution, school), type of cultural participation (i.e. receptive or active participation, one-off participation or participation on multiple occasions), outcomes (including negative outcomes), potential ethical issues, determinants of success, determinants of failure, and key conclusions of study authors. In addition, information was extracted on the findings' potential to inform policies based on the authors' conclusions regarding the extent to which the outcomes of their study have the potential to inform public policies, strategies, or plans.

The data extraction tool was slightly modified and revised as necessary during the process of extracting data from each evidence source included. The modifications included:

- (1) adding information about the type of intervention presented (whether individual, group or combination of individual and group interventions);
- (2) adding details about the name of the intervention, programme or policy presented, as well as enabling multiple selection for most of the variables included in the data extraction form.

## Data Analysis and Presentation

The data analysis and presentation in the present review consists of text, tables and figures presenting the results of the scoping review in terms of publication year, settings, participants, type of cultural activity, participation or outcomes improved, as well as any available policy recommendations.

## Policy Recommendations: Methodology

This section addresses question (c) which policies in the field of culture might contribute, directly or indirectly, to maximising the benefits?

The work in this section is aligned with the policy cycle approach and the key elements of policy analysis (identified by Knoepfel et al., 2007). The four main phases of the policy cycle are:

1. agenda setting;
2. formulation of the policy programme;
3. implementation;
4. evaluation.

This section focuses on the first two phases of the policy cycle. Recommendations regarding the third and fourth phases (implementation and evaluation) will be provided in a subsequent phase of the project, taking into account the empirical learnings from the project's pilots.

Regarding the report's specific approach to policy analysis, Knoepfel et al. (2007) call for an examination of four elements:

1. actors (the political-administrative authorities, target groups and end beneficiaries);
2. resources – according to Knoepfel et al. (2007), this category includes information but in the context of the project as a whole, we define this as evidence regarding enablers and barriers;
3. institutional rules (in this case, the competencies of the EU regarding not only culture and well-being but also all other relevant and overlapping policy areas);
4. the substantive and, when possible, the institutional content of existing policies.

The Policy Recommendation section focuses mostly on actors, resources and the content of existing policies.

The policy researcher (Mafalda Dâmaso) wrote the first draft of this section. Subsequently, the other team researchers and the Culture Action Europe team reviewed it, before opening the section and the report to internal review by the Advisory Board and consortium partners.

### Broad Recommendations

Our initial aim was to summarise the findings of the data extraction in the light of existing policies (search terms: policy OR plan OR strategy). However, this search resulted in very few relevant documents. The significance of this fact is discussed in the relevant chapter. Because of this, the report summarises documents provided by the project partners and Advisory Board.

First, in the subsection Findings of the Data Extraction: What Works and What Could Work Better?, the chapter begins by identifying key actors, policy approaches and lessons learned that emerged in the scoping review. Secondly, in the subsection Policy Recommendations – Or What Can Be Done?, the following questions are addressed:

- (a) What evidence is there that participation in cultural activities improves the health and well-being of citizens?, and;
- (b) Which specific forms of cultural participation appear to have a more positive impact?

Thirdly, in the subsection Policy Programme – Or What Kind of Impact Can Be Expected, and How Can It Best Be Facilitated?, the main policy pathways connecting culture with health and well-being are identified, and the broad policies that could be included to expand such dimensions are proposed. In doing so, the report also identifies the main needs in terms of cross-sector collaboration, hence addressing the question (d) What synergies are necessary with other policy fields?

### Specific Policies and Targeted Investment Measures

The fourth subsection in this chapter focuses specifically on practical recommendations for policymakers at the EU level (focused on the 'usability' of the policy recommendations).

# SCOPING REVIEW FINDINGS

The scoping review included 310 studies with different methodologies, including meta-analysis, systematic reviews, scoping reviews, randomised controlled trials, non-randomised/quasi-experimental observational studies, mixed-methods studies, text and expert opinion papers, qualitative studies and policy reports.

These studies were conducted around the world: in European Union member states (Italy, Netherlands, Sweden, Denmark, Finland, France, Spain, Portugal, Poland, Germany, Greece and Ireland), the UK, the USA, Canada, Africa, Asia and Latin America. There were also studies carried out in two or more countries and online.

To answer the first research question – (a) What evidence is there that participation in cultural activities improves the health and well-being of citizens? – we have analysed and extracted well-being outcomes and grouped them under four main themes:

1. Culture and Health;
2. Culture and Subjective Well-being;
3. Culture and Community Well-being;
4. Culture and COVID-19.

Evidence from 137 studies were included in the Culture and Health chapter, 117 in Culture and Subjective well-being, 131 in Culture and Community Well-being and 12 in Culture and COVID-19. Several articles have been included under two or more thematic headings, since they presented outcomes of relevance to more than one theme.

Table 1. Numbers of studies with evidence of art-related well-being outcomes included under the four thematic headings.

Thematic chapter	N° of studies included
Culture and Health	138
Culture and Subjective well-being	118
Culture and Community well-being	131
Culture and COVID-19	12

The second research question -- (b) Which specific forms of cultural participation appear to have a more positive impact? – is addressed in the analysis presented under each thematic heading. A summary of the findings responding to these two research questions across the four focus areas is presented in the *Discussion* chapter.

Under each of the major themes, a synthesis of the findings is presented, offering information on the type of cultural intervention, target group and type of study. To describe the cultural interventions, we have identified the broader art disciplines (Music, Theatre, Visual Arts, Photography and Film, Literature, Storytelling, Design and Architecture, Heritage and Museums, Circus, Crafts and Multiple Art Forms), the type of cultural participation (Receptive or Passive and Active) and the type of intervention (e.g., workshops and art classes). Where relevant, additional comments have been included to enable an understanding of the limitations and enabling factors.

When referring to the types of cultural participation, the literature differentiates between receptive and active participation. Passive or receptive enjoyment or attendance refers to cultural consumption, and active involvement, corresponds to engagement, entailing creative participation in culture as an activity (European Parliament & Pasikowska-Schanass, 2018).



# 1. Culture and Health

The Culture and Health sub-chapter uses the WHO report (Fancourt & Finn, 2019) as a reference point. The findings are structured using the main categories proposed by the WHO report – namely (A) Health Prevention and Promotion and (B) Management and Treatment of Disease – to allow comparison and facilitate analysis. Under these two themes, the evidence is clustered by health condition, and provides information on the format and type of cultural intervention.

The WHO Report (Fancourt & Finn, 2019) has also highlighted how the arts affect the social determinants of health by supporting social cohesion and addressing social inequalities. In the case of our report, these benefits are included in the Community Well-being section, acknowledging their importance in promoting health, but also valuing the social aspects as a dimension of well-being. Some 138 studies have been included in this section, of which 46 included evidence regarding the contribution of the arts to health prevention and promotion and 92 had relevance to management and treatment of disease.

## 1.1 Summary of evidence

### A. Prevention and Promotion

#### Healthy living and health-promoting behaviours

A scoping review found that engaging in various art activities and interventions can have mental health benefits for children and youth, improve the mental health and well-being in working adults and enable improved quality of life, social contact and mental health and well-being in older adults (Jensen et al., 2020).

A rapid review found positive associations between adolescents' creative engagement and promotion of healthy lifestyles, such as engaging in physical activity and the reduction of risk behaviours (Bungay & Vella-Burrows, 2013). A cross-sectional study showed that participation of adolescents in cultural activities was associated with better reported health, life-satisfaction and self-esteem in adolescents, with higher frequency of participation being associated with better reported outcomes (Hansen et al., 2015). The results of a longitudinal cohort study on the effects of an arts on prescription project on adolescents indicated that participation in visual arts workshops (wire sculpting, clay, painting and collage) led to significant improvements in mental well-being and resilience immediately after participation (Efstathopoulou & Bungay, 2021).

A cross-sectional study found that daily music making was associated with reports of better health in practising adults. Women who reported daily music-making, claimed less often to have poor physical or mental health compared to their control group (Ekholm et al., 2016).

A randomised controlled trial found that older people participating in community singing benefited from an increased mental health related quality of life when compared to those engaged in usual activities, suggesting that such interventions may be useful in supporting the mental health of older people (Coulton et al., 2015).

A longitudinal study confirmed a positive association between attending cultural events and self-reported health, although a causative relationship between cultural attendance on physical health was not confirmed (Wziak-Biaowska & Biaowski, 2016).

A population based study showed that participation in receptive and creative cultural activities was significantly associated with good health, good satisfaction with life and low anxiety and depression scores. For women, the association between active cultural participation was stronger with perceived health, while for men attending receptive, rather than creative, cultural activities was more strongly associated with all health-related outcomes. Study results supported arguments for the inclusion of cultural activities in health promotion and healthcare (Cuyppers et al., 2012).

The aesthetic experiences related to visiting a cultural heritage site demonstrated a noticeable impact on individual physical and mental health in terms of stress reduction (cortisol levels) and well-being (Grossi et al., 2018).

#### Health communication

Multiple studies suggested that attending theatre performances with health-related subjects can increase awareness and understanding of various health conditions (Burns et al., 2018; Ghosh et al., 2006) and can support engagement around antibiotic use (Swe et al., 2020) or prenatal screening (Hundt et al., 2011). At the same time, involving children

in a community drama aimed at health communication did not prove effective in improving the level of knowledge of adults in the audience (Kamo et al., 2008).

Drawing can enable patients to express their disease-related states and may support medical staff in understanding the patient's condition (Nowicka-Sauer, 2007), which is especially useful in the case of hospitalised children (Kortelnuoma et al., 2008).

## Prevention of ill health

Evidence from a systematic review showed that group singing can improve respiratory and cardiovascular function, cognitive function, psychological well-being, social inclusion and the bonding of different populations (Hagemann, 2021). Elderly people at high risk of future dementia who engaged in choral singing benefited from improved cognitive functions and ageing support, according to a randomised active-controlled trial (Feng et al., 2020).

Participation in reading groups could enable improved mental states and well-being (Jensen et al., 2020), social bonding and inclusion, self-expression and the finding of meaning (Billington, 2019).

Singing bowl therapies were linked to the improvement of physiological measurements like blood pressure, heart rate and respiratory rate (Stanhope & Weinstein, 2020).

There is also evidence associating the viewing of a visual artwork with stress and systolic blood pressure reduction (Law et al., 2021).

Participation in dance activities was associated with improved mood and reduced depression and anxiety symptoms, pain relief, enhanced physical functioning, improved quality of life and better social inclusion and bonding (Baltà Portolés, 2021, Cruz-Ferreira et al., 2015, Brustio et al., 2018, Kim & Lee, 2016). Also, participation in dance classes might positively affect the cognitive function of elderly people (Marquez et al., 2017).

Older women actively engaged in music and painting can benefit from improved emotional well-being (Liddle et al., 2012), while dancing might reduce their risk of falls (Cruz-Ferreira et al., 2015, Britten et al., 2017). Group singing may have positive effects on the health and well-being of elderly people (Fu et al., 2018, Skingley et al., 2016).

In addition, there is evidence that playing a musical instrument from adolescence into adult life can improve episodic memory, though it may not reduce the rate of memory decline (Romeiser et al., 2021). Playing a musical instrument is also a protective factor for cognitive function and an enabler for social and psychological well-being in healthy older adults (Mansky et al., 2020).

A study found associations between certain forms of receptive cultural engagement - more specifically visiting museums/ galleries/exhibitions, going to theatre/concert/opera and to cinema - and lesser decline in cognitive function in older adults over a ten years' period, more frequent participation being associated with greater effects (Fancourt & Steptoe, 2018).

## Maternal mental health and mother-infant bonding

Evidence shows that singing-based early postpartum interventions for mothers and their babies can help to lower cortisol levels, leading to improved maternal emotional states and mother-infant bonding (Wulff et al., 2021a). Music therapy can promote signs of engagement in preterm infants (Palazzi et al., 2021), while no effects of maternal singing during feeding were observed on the level of weight gain of preterm infants (Blumenfeld & Eisenfeld, 2006). A randomised control trial showed that group singing can reduce postnatal depressive symptoms in new mothers (Fancourt & Perkins, 2018).

## Caregiving

Participation in singing activities can provide emotional and social support to caregivers and medical staff (Fancourt et al., 2019; Moss & O'Donoghue, 2020). Similarly, storytelling may support bereaved parents through mourning (Bosticco & Thompson, 2005) and enable sense-making and emotional release in cancer patients and caregivers (DeSanto-Madeya et al., 2021). Art interventions in health settings were found to improve the quality of well-being in the workplace in health workers (Jensen & Bonde, 2018). Engaging with creative activities may enable reflection, self-expression and professional relations in both healthcare professionals and medical students (Rodríguez et al., 2012, Jones et al., 2017).

A systematic review shows that art and environmental design in mental healthcare units improved the perceptions of the healthcare environment, and the well-being of patients and staff (Daykin et al., 2008a).

## B. Management and Treatment

### Mental health conditions

Creative art interventions may lower depression symptoms in older adults as a result of improved physical, intrapersonal, cultural, cognitive and social factors, as shown by a systematic review (Dunphy et al., 2019).

Singing can contribute to the management of mental health conditions in adults, and to an increase in the perceived ability to cope with stressful experiences, though there seems to be no direct decrease of psychological stress (Sun & Buys, 2016).

An arts on prescription programme proposing participation of people dealing with anxiety, depression, social isolation or chronic pain in varied art forms demonstrated significant improvements in global well-being – namely improved mood and reduced tension – during and after participation (Holt, 2020). Previous studies (Crone et al., 2013; Crone et al., 2018) also showed that arts on prescription programmes can lead to significant improvements in the well-being of people with mental health conditions (including multiple morbidities).

Systematic reviews found that group singing can lead to enjoyment, improved emotional states, sense of belonging, self-confidence, improved mental health and wellbeing in those living with a mental health condition (Williams et al., 2018) and can have certain beneficial effects on mood, depression, anxiety and health related quality of life of people with chronic diseases (Reagon et al., 2016).

An RCT which focused on the health effects of group singing in mothers suffering from post-natal depression found significant improvements in women diagnosed with moderate-severe postnatal depression symptoms (Fancourt & Perkins, 2018).

A systematic review found that visual arts activities, including painting, drawing, art appreciation and viewing, creation and exhibition of art, and crafts can decrease perceived levels of anxiety and depression, increase self-worth, self-esteem and self-respect, stimulate re-engagement with the social world, and a potential renegotiation of identity for people living with mental health conditions (Julier et al., 2018). A qualitative inquiry revealed that guided museum visits and creative workshops enhanced the sense of self-empowerment and realisation of new meanings in life for mental health service users (Jensen, 2018a).

Other studies show that active engagement with a variety of creative activities such as singing, dancing, creative writing, drama, visual arts and crafts can benefit individuals with mental health conditions through improved emotion regulation strategies (Fancourt & Ali, 2019), increased experience of positive emotions (Dingle et al., 2017), well-being (Leckey, 2011; Holt, 2020), increased energy, motivation, reduced panic attacks (Jensen, 2019), and improved self-acceptance and identity in relation to being mentally ill (Buchan, 2020; Ørjasæter & Ness, 2017; Julier et al., 2018; Slattery et al., 2020; Sitvast & Springer, 2020). Reading activities supported adults with mental-health conditions by reducing depressive symptoms and improving personal meaning and social connection (Dowrick et al., 2012; Hilse et al., 2007). Long-term engagement with art- and craft-based therapies showed sustained improved health outcomes for hospitalised psychiatric patients (Caddy et al., 2012).

Social inclusion of those with mental health conditions may be supported through participation in creative activities, especially for those with severe conditions (Saavedra et al., 2018; Leckey, 2011) or those living in remote areas (Leenders et al., 2011).

Creative activities carried out in community settings can facilitate health service utilisation by young people with mental health conditions (Shik, 2013). Theatre activities can support patient care and quality of life of young hospitalised patients with eating disorders (Pellicciari et al., 2013).

### Neurodevelopmental and neurological disorders

People with dementia who participated in semi-improvised drama activities appeared to benefit from an increased Positive Affect and engagement and a decrease in negative forms of engagement. For a sub-sample diagnosed with depression, a decrease in symptoms was also recorded (Zeisel et al., 2018).

Group singing for dementia patients and their family carers were found to have a stabilising effect on their stress and anxiety and quality of life measures, while appreciation of social aspects was reported (Camic et al., 2011). Decrease of resistant behaviour and increase of positive emotions were also noted in the case of music therapeutic caregiving (Hammar et al., 2011). Orchestral music-making or listening have been found to be connected to psychological benefits such as improved mood and engagement; improved social functioning; a sense of belonging and reduced social isolation; improved physical and health-related behavioural outcomes; and the improved cognitive function of elderly

people living with dementia (Warran & Welch, 2019).

Promising results were found by a scoping review that assessed the effects of online group singing, as long as the use of that technology is adapted to the patient's level and support is offered (Dowson & Schneider, 2021). Watercolour painting can positively influence well-being domains of interest, sustained attention, pleasure, self-esteem and normalcy (Gross et al., 2015), while a dance intervention may enhance confidence in balance, the quality of life and well-being (Koh et al., 2020). Storytelling and the use of digital content for telling stories provided certain support for people with dementia in accessing long-term memories (Critten & Kucirkova, 2019), was found to have a short term increase in Positive Affect and communication skills (Phillips et al., 2010), and aided self-expression and social interaction (Stenhouse et al., 2013). Studies also highlighted the positive effect of participation in the arts of people with dementia for the well-being of their caregivers (Koh et al., 2020; Stenhouse et al., 2013).

The results of a randomised control trial indicated that singing supported the stabilisation of episodic verbal memory in patients with mild Alzheimer's, while painting enabled the reduction of depressive symptoms and anxiety, being more suitable for introverted individuals (Pongan et al., 2017). Museum activities also appear to support positive mood changes in individuals in the early and middle stages of Alzheimer's disease and their care-givers (Rosenberg, 2009).

A feasibility study showed that people with Parkinson's experienced slight improvements in speech and prevention of deterioration in speech function as a result of music therapy voice and singing intervention (Elefant et al., 2012). A randomised controlled trial found that people with Parkinson's benefitted from reduced disease severity and improved gait, balance and upper extremity function after attending tango dance activities (Duncan & Earhart, 2012).

Other studies show that singing can increase the quality of life (Stegemöller et al., 2017; Buetow et al., 2014) and mental well-being of people with Parkinson's across cultures and gender (Irons et al., 2021), and may help to improve physical, emotional and cognitive functioning, social connectedness, flow-on effects and the sense-of-self (Abell et al., 2017). Negative effects have been recorded in relation to some patients' inability to engage, based on past abilities and expectations (Abell et al., 2017).

Elderly people with amnesic mild cognitive impairment engaged in dancing classes benefitted from better maintenance of cognitive abilities and performance in regular functionality, mood and behaviour (Lazarou et al., 2017). Additionally, dance exercises can help people with schizophrenia have better functional capacity and quality of life (Kaltatou et al., 2015).

Children and adolescents with cerebral palsy participating in adapted hip-hop dancing classes seemed to benefit from improved quality of life, physical functions, increased social competence and a reduction in emotional and behavioural problems (Withers et al., 2019).

Chronic stroke patients engaged in drawing, painting, collage and handicrafts activities benefitted from body and brain stimulation, enjoyment, self-appreciation, self-expression and social connection with others (Bronken et al., 2012), while psychological well-being of stroke survivors was enhanced through engaging in story making with nurses seemed (Sit et al., 2017).

A music therapy intervention using original songs and an experimental musical adaptation of the outdoor playground with the aim to improve peer interactions and meaningful play among children with autism, found that customised songs helped peer interactions. The playground adaptation itself did not lead to better social interaction for the children with autism, but facilitated their play and involvement with other participants by attracting them to play with the instruments (Kern & Aldridge, 2006). Music therapy may support increased attention and actions of social engagement (Vaiouli et al., 2015), while circus training could promote social development and well-being in children on the autistic spectrum (Seymour & Wise, 2017).

## Noncommunicable diseases

According to a literature review, art therapy and participatory creative arts interventions demonstrated beneficial effects for various health conditions, including cancer, chronic pain and chronic obstructive pulmonary diseases, benefits that included improvements in physical function, reduced depression and anxiety, and improved mood and psychosocial resources (Jensen & Bonde, 2018).

Several studies indicate positive effects of singing for people with respiratory diseases at physical, psychological and social levels. These benefits included: physical – that is, increases in respiratory muscle strength, improved maximal respiratory pressure, and the reduction of dyspnea and perceived respiratory symptoms (Bonilha et al., 2009; Goldenberg, 2018); psychological – that is, an improved quality of life, increased mood and vitality, and reduced mental pain and depressive symptoms (Bonilha et al., 2009; Goldenberg, 2018; Liu et al., 2019); and social participation (Goldenberg, 2018; Lewis et al., 2016). Face-to-face and online group singing also proved effective by improving confidence

and depression scores for people with long-term respiratory conditions (Philip et al., 2020). Other studies into the benefits of singing also showed improved exercise capacity (McNaughton et al., 2017), acute physiological responses and increased minute ventilation and breath volumes, showing similar responses to a moderate-intensity physical activity (Philip et al., 2021). Group singing activities seemed enjoyable and well accepted (Liu et al., 2019), and feasible in the long-term (McNaughton et al., 2017).

A randomised control trial indicated that active engagement with music and painting improved the recovery and quality of life of hospitalised patients with ankylosing spondylitis, showing better results than routine treatment. For these patients, music therapy is suggested as auxiliary treatment (Qin, 2020).

Patients with chronic structural heart disease engaged in choir singing benefited from improved respiratory muscle strength and quality of life, according to the results of a randomised controlled trial (Ganzoni et al., 2020).

A systematic review showed that, in the case of cancer patients, creative art therapies contributed to reduced symptoms of anxiety, depression and pain, as well as an improved quality of life (Puetz et al., 2013).

Various forms of creative engagement can help improving the quality of life of paediatric cancer patients and their parents (Madden et al., 2010), of oncologic patients undergoing chemotherapy (Bozcuk et al., 2017) and of patients with cancer (Visser & Op 't Hoog, 2008). Long-term participation of cancer patients in dance activities was associated with a high self-efficacy and an active lifestyle (Thieser et al., 2021). Creative activities, mainly those involving visual arts and crafts, enabled cancer patients to learn new ways of coping with limited physical abilities and existential problems (la Cour et al., 2007), and to support conscious and meaningful living (Visser & Op 't Hoog, 2008). Cancer survivors with laryngectomy participating in adapted beatboxing workshops got to exercise their novel vocal instruments and improve breathing (Moors et al., 2020). The provision of hospital clown interventions for procedural support and as part of routine medical care in chronic conditions can lead to beneficial health effects in hospitalised young patients, including reduction of pain, anxiety and cancer-related fatigue, as well as improved psychological and emotional reactions, and in patients' overall sense of well-being (Lopes-Júnior et al., 2020).

A study showed that operative epistemic interview combined with interactive drawing can enable children with type 1 diabetes to express body and illness perception, and enhances doctor-patient communication (Vanelli et al., 2018).

Creative activities enabled patients in primary care to better manage aspects related to their health condition (Redmond et al., 2019). Art-making became a viable occupation and source of well-being for women with chronic fatigue syndrome/myalgic encephalopathy (Reynolds et al., 2008).

## Acute conditions

A large scale RCT indicated that painting can help alleviate pre-operative anxiety in children undergoing elective surgery, with such activities being suggested as routine medical care (Forouzandeh et al., 2020). Three systematic reviews and meta-analyses have found significant evidence for the beneficial effect of listening to music for surgery patients. Listening to pre-recorded music before surgery proved effective in reducing anxiety (Bradt et al., 2013, Fu et al., 2019). Also significant beneficial effects for the use of music interventions were reported for patients in the recovery period after surgery, including reduced pain, anxiety and use of analgesics, and improved patients' satisfaction. Music interventions were also effective when patients were under general anaesthetic (Hole et al., 2015).

Systematic reviews indicated that hospital clown interventions were significantly effective in the reduction of stress and anxiety levels in hospitalised paediatric patients and their parents (Sridharan & Sivaramakrishnan, 2016; Zhang et al., 2017; Lopes-Júnior et al., 2020).

Various studies showed that engagement with art and creative activities can facilitate pain reduction and management in different medical contexts. Group singing may be an effective and safe approach for reducing pain in people with long-term health conditions (Irons et al., 2020b; Irons et al., 2020a). Listening to brainwave music supported the relief of orthodontic pain in adults (Huang et al., 2016). Live music interventions showed good results for pain and distress reduction in the case of children undergoing blood tests and were well accepted by the children and their parents (Caprilli et al., 2007). Active engagement with creative arts assisted pain reduction during cancer treatment (Puetz et al., 2013). Listening to music and engagement with music was also found to support pain management (Hauck et al., 2013).

## Different ways of engaging with arts and culture activities

Among the studies screened, certain art forms and intervention models appeared more frequently. This does not necessarily mean that other art-based approaches are less effective, but that they may have been less studied or are less represented in the databases we searched for our resources. That said, we noticed that:

- Group singing seems to provide benefits and to be widely used for improving the health and well-being of people with respiratory conditions, people with Parkinson's and dementia, and elderly people;
- Theatre is often used for health communication;
- Dance was more frequently used in the management of Parkinson's disease, and for physical and psychosocial outcomes in elderly people;
- Visual arts in various forms – e.g., drawing, painting, photography or crafts – were used to help enable patients to express their conditions, provide self-reflection, meaning and a sense of achievement and appreciation for people with various conditions, including cancer, diabetes and mental illnesses;
- Playing a musical instrument requiring long-term engagement was associated with cognitive benefits in adults, while daily music-making was associated to better health in adults;
- Creative art therapies, combining multiple arts techniques and actively engaging participants, are used as complementary therapies in various healthcare settings.

Among the 138 included studies, 106 (76.8 per cent) refer to active forms of cultural engagement, 16 (11.6 per cent) to receptive participation and 16 (11.6 per cent) to both active and receptive forms of participation. In this respect, we can conclude:

- Receptive experiences with the arts have a certain potential to support health promotion, especially by providing creative ways of health communication such as improved knowledge and understanding of health-related subjects. In specific cases, activities like listening to music may also have benefits in terms of pain management (Hole et al., 2015, Huang et al., 2016), improved physiological measurements (Stanhope & Weinstein, 2020), reduced anxiety before and after surgery (Bradt et al., 2013, Hole et al., 2015, Fu et al., 2019), post-operative recovery (Hole et al., 2015), and reduced pain and anxiety for children undergoing blood tests (Caprilli et al., 2007).
- There are also positive associations between overall cultural participation, involving both receptive and active forms, and self-reported physical health or life satisfaction (Hansen et al., 2015). Certain studies note that no causative relation between voluntary cultural engagement and health could be identified (Weziak-Bialowolska, 2016). The majority of studies focus on active engagement with the arts and creative activities to produce health outcomes both in terms of promotion and prevention and management and treatment.
- A study on a large population sample has found a light but consistent stronger relationship between receptive cultural activities and satisfaction with life, and low anxiety and depression scores in women and men (Cuypers et al., 2012).

Most art programmes aiming to produce health outcomes covered by the studies included in our scoping review involved a targeted cultural intervention design. Thus, expert knowledge rooted both in the arts and the health sectors is necessary in order to create effective interventions.



## 1.2 Included studies

### A. Prevention and Promotion

Target group	Art discipline	Participation	Intervention	Specific outcome	Type of study	Comments, limits, negative outcomes	Reference
Healthy living and health promoting behaviours							
Adolescents (11-18)	Multiple	Receptive and active	Creative activities	Promoting behaviour change and healthy lifestyles (physical activity, mental well-being, less risky behaviours), increased confidence and social skills	Rapid review		Bungay & Vella-Burrows, 2013
Adolescents	Multiple	Receptive and active	Reading a book, listening to music, playing an instrument, meeting, training, visiting a library, cinema or theatre, attending music or sports events or choir singing	Better reported health, life-satisfaction and self-esteem in the case of cultural participation.	Cross-sectional study	Frequency of participation was found impactful, routine participation being associated with better reported outcomes.	Hansen et al., 2015
Adolescents	Visual Arts	Active	Arts on Prescription: wire sculpting, clay, painting, and collage	Improved mental well-being and resilience	Longitudinal cohort study	Significant improvements immediately after participation, though effects were not sustained after three months.	Efstathopoulou & Bungay, 2021
Children, adolescents, adults and elderly	Multiple	Receptive and active	Music listening, classes and therapy groups, choral singing, dance classes, visual art making, museum visits, reading groups, theatre educational workshops, clowning, Arts on Prescription	Children and youth - mental health benefits from participation in theatre, dance and music; Working adults - improved mental health and well-being from participation in nature activities, choral singing, shared reading groups and arts on prescription programmes; Elderly - improved quality of life, social contact and increased mental health and well-being through theatre, music, music-based caregiving, museum visits, reminiscence dance, and use of clowns.	Scoping review	Not everyone is eager to engage and respond positively to arts activities. When people engage the sense of feeling deflated can appear once the intervention has ended.	Jensen et al., 2020
Adults	Heritage	Receptive	The aesthetic experience of visiting a cultural heritage site	Impact on individual physical and mental health: stress reduction (cortisol levels) and well-being increase	Experimental study		Grossi et al., 2018
General population	Museum and art galleries	Receptive and active	Museum and art galleries activities	Strong positive correlations between cultural activities and health	Narrative synthesis		Camic & Chatterjee, 2013

Target group	Art discipline	Participation	Intervention	Specific outcome	Type of study	Comments, limits, negative outcomes	Reference
Adult participants	Multiple	Receptive and active	Participation in cultural activities	Good health, good satisfaction with life, low anxiety and depression scores in both genders. Findings report that for women the association between active cultural participation was stronger with perceived health, while, in men, attending receptive, cultural activities was more strongly associated with all health-related outcomes	Population-based study	Noticed a slight but consistent stronger relationship between anxiety, depression and satisfaction with life and receptive cultural activities in both genders	Cuypers et al., 2012
Adults	Multiple	Receptive and active	Voluntary engagement with the arts	The study does not report any causative influence of either active, nor passive voluntary cultural activity on health and well-being. The existence and intensity of somatic symptoms, the frequency of depressive moods, and general life satisfaction were all demonstrated to be unaffected by cultural activity.	Longitudinal study	The findings from the study might be compromised by several issues and this study was limited to the Swiss population	Węziak-Białowolska, 2016
Adults	Multiple	Receptive	Attendance at cultural events	Attendance at cultural events and self-reported health could only be confirmed as associational. No evidence of positive impact on physical health. Little evidence to support cultural attendance with the intention of improving health.	Longitudinal study	This study is threatened by several challenges and the findings do not contest that active cultural participation may be beneficial to health	Węziak-Białowolska & Białowolski, 2016
<b>Health communication</b>							
General population	Theatre	Receptive	Performance at community festival	Increased public awareness and destigmatisation of dementia; after watching the performance, there was a significant shift in emotional impact, from an initially strong negative feeling to a slightly positive/relaxed outlook.	Pre-post study		Burns et al., 2018
General population	Theatre	Active	Applied theatre	Debate and engagement with the complexities of prenatal screening; Medical professional felt they had a better understanding of their patients' experiences	Case study	Extent of engagement and its effects not captured; requires a follow-up	Hundt et al., 2011
General population in rural setting	Theatre	Receptive	Folk theatre	Accurate and scientific data on the prevention and control of malaria	Case study	Immediate behavioural changes not observed	Ghosh et al., 2006



Target group	Art discipline	Participation	Intervention	Specific outcome	Type of study	Comments, limits, negative outcomes	Reference
Adults	Theatre	Receptive	Community drama with children and adolescents aged 10 to 14 years	Knowledge on HIV treatment, testing and prevention	Cluster randomised controlled trial	Adolescents can effectively communicate with adults and increase their sensitivity toward the impact of the HIV/AIDS. No change of knowledge in adults participating as an audience.	Kamo et al., 2008
General public	Theatre	Active	Forum theatre	Increased public engagement and dissemination of knowledge regarding antibiotic use	Qualitative study	Forum theatre could be an innovative method to engage and promote accurate knowledge regarding health within the community	Swe et al., 2020
Adults	Digital storytelling	Receptive and Active	Creating and watching digital stories	Increased knowledge and understanding on cancer directly from patients	Qualitative study	Cancer education courses	Cueva et al., 2016
Women with systemic lupus erythematosus	Visual Arts-Drawing	Active	Drawing the disease and comment their work	Enhanced openness and sharing of personal experience; assisted medical staff's understanding of the patient's condition, preventing schematization	Qualitative study	Drawing could be used as an unconventional research method as well as a therapeutic approach	Nowicka-Sauer, 2007
Hospitalised children	Visual Arts-Drawings	Active	Drawing pain stories	Assisted with self-explanation of pain. Drawings can elicit information about children views and experiences; decreased cognitive performance in hospitalised children; more emotional disturbance in the control group than in the hospitalised children's group	Qualitative study		Kortesluoma et al., 2008
Prevention of ill health							
Adults	Music	Receptive	Singing bowl therapies	Improvements in blood pressure, heart rate, respiratory rate, peripheral capillary oxygen saturation, cutaneous conductance, and anterior-frontal alpha values; benefits on distress, positive and negative affect, anxiety, depression, fatigue, tension, anger, confusion and vigour	Systematic review	Given the limitation on the number of studies, singing bowls therapies is not recommended at this point; future studies with robust methodologies are recommended	Stanhope & Weinstein, 2020
General population	Music	Active	Choir and singing groups	Improved respiratory and cardiovascular function, improved cognitive function; improved psychological well-being, improved social inclusion and bonding	Systematic review		Hagemann, 2021

Target group	Art discipline	Participation	Intervention	Specific outcome	Type of study	Comments, limits, negative outcomes	Reference
Multiple	Dance	Active	Dance classes, movement therapy	Improved mood and reduced depression and anxiety symptoms, pain relief, enhanced physical functioning, improved quality of life, improved social inclusion and bonding	Review		Baltà Portolés, 2021
Multiple	Literature	Active	Reading groups	Improved mood and mental states, social bonding and inclusion, self-expression, finding of meaning; increased theory of mind	Literature review		Billington, 2019
General population	Visual Arts	Receptive	Viewing a visual artwork	Stress reduction, systolic blood pressure reduction	Scoping review		Law et al., 2021
Middle-aged women	Dance	Active	Line dancing	Perceived health benefits and well-being, feelings of social closeness,	Qualitative study	Constant participation in a leisure activities is recommended for the improvement of health	Kim & Lee, 2016
Adults aged over 52	Multiple	Receptive	Going to (1) museums/ galleries/ exhibitions, (2) theatre/concert/ opera, and (3) cinema	These forms of receptive cultural engagement were associated with lesser decline in cognitive function (memory and semantic fluency) over 10 years, more frequent participation being associated with greater effects.	Cross-sectional Study	Cinema visits were found to have little effects on cognition.	Fancourt & Steptoe, 2018
Elderly at a high risk of dementia	Music	Active	Choral singing	Improving cognitive functions and ageing support	Randomised controlled trial	The study lacked a non-intervention control group	Feng et al., 2020
Latino Elderly	Dance	Active	Latin dancing classes	Cognitive function (improved episodic memory in dance group and improved overall cognition in both groups)	Pilot randomised controlled trial		Marquez et al., 2017
Elderly women	Dance	Active	Creative dance	Beneficial effects on physical fitness and life satisfaction, might play an important role in the prevention of falls	Randomised controlled trial	Small sample size and the results cannot be generalized	Cruz-Ferreira et al., 2015
Elderly	Dance	Active	Contemporary dance	Contemporary dance can positively impact older females' physical activity, sitting behaviour, falls related efficacy, mobility and depression in older females, which could lead to a decrease in the likelihood of falling.	An uncontrolled 'pre-post' intervention design	Control groups are required to test this intervention further.	Britten et al., 2017
Elderly women	Multiple	Active	Music instrument and painting	Participants experienced significant improvement in emotional well-being	Population-based study	Participation was significantly influenced by improved physical and cognitive capacity, but it is impossible to say whether or not this development is due to participation or is made easier by participation.	Liddle et al., 2012

Target group	Art discipline	Participation	Intervention	Specific outcome	Type of study	Comments, limits, negative outcomes	Reference
Elderly adults in senior living communities	Music	Active	Group singing	Group singing may promote memory, language, speech information processing, executive function, and respiratory muscle strength in older adult	Quasi-experimental study	No control group was used; the changes observed did not improve the quality of life	Fu et al., 2018
Elderly people	Dance	Active	Dance classes	Positive effects on mobility performance, improvement of quality of life and social engagement	Pre-test–post-test study	Dance as a feasible form of physical training (not expensive, suitable and adaptable for elderly adults)	Brustio et al., 2018
Elderly people	Music	Active	Community singing	Benefits for health and well-being, such as breathing, enjoyment and social connection	Mixed-methods study	Limited to a geographical location and to a sample potentially aware of the singing benefits	Skingley et al., 2016
Older adults	Music	Active	Playing a musical instrument	May assist in preserving cognitive function in community-dwelling older adults.	Post-hoc observational analysis	Results need to be confirmed in a clinical trial	Mansky et al., 2020
Lifelong (individuals assessed at ages 18, 36, 65 and 72)	Music	Active	Lifelong musical instrument engagement	Improved episodic memory when engaging in musical instruments in adolescence and adulthood, but may not reduce the rate of decline; may delay the cognitive impairments later in life	Longitudinal cohort study	The results are not generalisable across different races	Romeiser et al., 2021
<b>Mother-infant health and bonding</b>							
Mothers	Music	Active	Singing-based intervention	Lowered cortisol levels, improved maternal emotional state and mother-infant bonding	Randomised controlled trial	There were no long lasting positive effects	Wulff et al., 2021a
Mothers	Music	Active	Music therapy (maternal singing)	Music therapy could promote preterm infant's signs of engagement during interactions and can promote maternal intuitive abilities	Experimental study	The small sample size limitation	Palazzi et al., 2021
Mothers and preterm infants	Music	Active	Maternal singing during feeding	No contingent effect on feeding or weight gain was observed.	Pilot study (experimental design)		Blumenfeld & Eisenfeld, 2006
Women with postnatal depression	Music	Active	Group singing	Reduced postnatal depressive symptoms	Randomised controlled trial		Fancourt & Perkins, 2018
<b>Caregiving</b>							
People with dementia and their caregivers	Music	Active	Music therapeutic caregiving	People with dementia seemed to experience care situations as less uncomfortable and joyful as evidenced by a decreased resistant behaviour and an increased positive emotion.	Intervention study	Music therapeutic caregiving might be an effective nursing intervention for people with dementia	Hammar et al., 2011

Target group	Art discipline	Participation	Intervention	Specific outcome	Type of study	Comments, limits, negative outcomes	Reference
Cancer caregivers	Music	Active	Singing-Choir groups	Over time participants in the choir group showed a significantly decrease in anxiety than the control group and a significantly increase in well-being, yet no improvements were found for depression	Multisite non-randomised longitudinal controlled study	The choir group could be used to support the mental health and well-being of cancer caregivers	Fancourt et al., 2019
Adult cancer patients	Storytelling	Active	Legacy digital video creation, part of Dignity Therapy	Feasible and acceptable intervention across a range of cancer types in an outpatient setting, being a way for them to deal with their cancer experience and assist others	Pilot intervention study	Minimal study burden was reported, participants would recommend Dignity Therapy and would be use it in the future	DeSanto-Madeya et al., 2021
Bereaved parents	Storytelling	Active	Storytelling	Supported mourning processes, assist in sense making and reaching a cathartic release	Review		Bosticco & Thompson, 2005
Health service workers	Music	Active	Workplace choir	Improved self-perception of mental health and decreased depression rates; enhanced social connectedness, personnel engagement, and enjoyment	Mixed-methods study	A professional facilitator and financial costs should be covered. Only a limited segment of the staff, in general with good health and well-being, engaged in attending a work-place choir. Quantitative results are not statistically relevant.	Moss & O'Donoghue, 2020
Patients and staff in mental care facilities	Multiple	Receptive	Art, design and environment	Environmental enhancements in healthcare settings can positively impact the health and well-being of staff and patients, providing reassurance and creating identity	Systematic review	Other typical environmental factors in healthcare, like excessive noise, that may have negative impacts.	Daykin et al., 2008a
Students, faculty, and staff of a medical school	Literature	Active	Publishing in a creative arts journal	Creative arts publications in the journal encouraged self-expression and strengthened professional relationships.	Qualitative study		Rodríguez et al., 2012
Medical students	Visual Arts	Active	Narrative-based programme	Enhanced reflection on past experiences, personal growth and development, self-discovery, awareness of art as an important tool, enhanced sense of collaboration, enhanced reflection on the human side of illness and medical care, noticeable awareness over the people who experience an illness	Qualitative study		Jones et al., 2017

## B. Management and Treatment

Target group	Art discipline	Participation	Intervention	Specific outcome	Evidence strength	Comments, limits, negative outcomes	Reference
Mental health							
People with mental health conditions	Music	Active	Choir singing	Improved well-being and mental health with moderate to large effect sizes improved emotional states, sense of belonging, enjoyment and self-confidence	Systematic review	Performance anxiety	Williams et al., 2018
People with mental health conditions	Multiple	Active	Creative arts	Healing and protective effects on mental well-being, improvements within the individual's immediate social networks, reducing stress, stimulating relaxation, stimulating self-expression, boosting the immune system, reducing blood pressure	Systematic review	Need for clarity of concepts related to culture and mental well-being; lacking in generalisation; weak evidence	Leckey, 2011
Adults with mental health conditions	Visual Arts	Receptive and active	Painting or drawing, art appreciation and viewing, creation and exhibition of art, and crafts including ceramics and sculpture	Decrease reported levels of anxiety and depression, increase self-worth, self-esteem and self-respect, stimulate re-engagement with the social world, potential renegotiation of identity	Systematic review	From a methodological point of view, the quality of the studies was not regularly high	Julier et al., 2018
Adults with mental health conditions	Multiple	Receptive and active	Arts on Prescription: choir singing, guided reading, introduction to the city archives, music listening, museum and theatre visits, nature hike	Increased energy, motivation and self-esteem, improved self-awareness, higher sense of joy, reduced panic attacks, higher understanding of their needs, a better level of self-care, a higher alignment to the labour market.	Qualitative study		Jensen, 2019
Adults with mental health conditions	Multiple	Receptive and active	Guided museum visits followed by painting and sculpture workshop	Empowerment and meaning in life	Qualitative study	The positive influence of the museum visits was not evident in all museums and was impacted by the interaction with the tour guide	Jensen, 2018a
Adults with mental health conditions	Multiple	Active	Arts on Prescription: poetry, ceramics, drawing, mosaic, and painting	Improvements in well-being	Observational study		Crone et al., 2013

Target group	Art discipline	Participation	Intervention	Specific outcome	Evidence strength	Comments, limits, negative outcomes	Reference
Adults with mental health conditions	Multiple	Active	Arts on Prescription: poetry, ceramics, drawing, mosaic, and painting	Improvements in well-being	Observational study	Arts interventions have a high potential to improve well-being also for people with multiple morbidities.	Crone et al., 2018
Patients with chronic health conditions	Music	Active	Group singing	Beneficial effects on mood, depression, anxiety, health related quality of life,	Mixed-methods systematic review		Reagon et al., 2016
Adults dealing with mental health conditions, social isolation and chronic pain	Multiple	Active	Arts on Prescription workshops	Global well-being – improved mood and reduced tension; decrease of tense arousal (less stress, anxiety and nervousness),	Multilevel repeated measures study		Holt, 2020
Older adults	Multiple	Active	Creative art interventions	Reduced depression and symptoms by improving physical, intrapersonal, cultural, cognitive and social factors	Systematic review	Interventions led by creative arts therapists show best results	Dunphy et al., 2019
Older people	Music	Active	Community group singing compared with usual activities	Significant effects of singing on mental health related quality of life when compared with usual activities and no differences on physical aspects of quality of life, anxiety or depression six months after randomisation; anxiety and depression were significantly lower in the singing group at 3 months.	Randomised controlled trial	Compared to usual activities, group singing proved marginally more cost-effective.	Coulton et al., 2015
People with mental health conditions	Photography and Film	Active	Participatory Photography as therapy	Support in dealing with problematic issues, an enhanced sense of empowerment, enhanced therapeutic relationships, mental processing, peer support, expressing creativity, sense of achievement, enjoyment	Systematic search and literature review	Ethical issues that may arise with taking photographs of identifiable people; limited evidence	Buchan, 2020
Inpatients to a psychiatric hospital	Multiple	Active	Art- and craft-based creative therapies	Improvement in measured mental health outcomes over a five-year period	Correlational study		Caddy et al., 2012

Target group	Art discipline	Participation	Intervention	Specific outcome	Evidence strength	Comments, limits, negative outcomes	Reference
Adults	Music	Active	Singing	Lowered depression levels, better management of mental health conditions, perceived ability to cope with stressful experiences	Quasi-experimental study	No direct decrease of psychological stress	Sun & Buys, 2016
Adults with mental health conditions and healthy adults	Multiple	Active	Choir singing and creative writing	Increased experience of positive emotions, decreased experience of negative emotions in both experimental and control groups	Interventional study, repeated measures design	The fact that participants had been members of the groups for different durations could influence the emotion ratings	Dingle et al., 2017
Individuals with long-term mental health conditions	Multiple	Active	Theatre and music workshop	Improved experience of individual and collective identity	Qualitative study		Ørjasæter et al., 2017
Adults with severe mental health conditions and complex needs	Multiple	Active	Individual artwork, poetry writing, dance, play musical instruments, created a mural, wrote a song	Improved confidence, feeling valued, connectedness, self-acceptance, understanding of own mental health problems, creating hope	Longitudinal qualitative study	Writing was the least popular; group work raised tensions due to individual preferences	Slattery et al., 2020
Individuals with and without depression	Multiple	Active	Performing arts, visual arts, literature-related exercises, craft and design, digital, electronic and online art and other creative activities	Lower general use of self-reported emotional regulation strategies (approach and self-development strategies) when engaging in arts for people with depression, yet they still reported benefits on emotional regulation	Cross-sectional study		Fancourt & Ali, 2019
Individuals with severe mental conditions	Multiple	Active	Creative workshops: painting, drawing, collage, sculpture, printmaking	Improved social inclusion with a significant size effect and psychological well-being with a low size effect	Mixed-methods study (repeated measures design)	Impact may be increased by changing workshop's location from clinical settings to public space together with individuals without a diagnosis of severe mental illnesses	Saavedra et al., 2018
Indigenous individuals with mental health conditions living in remote areas	Visual Arts	Active	Exhibition, community-based Arts in Health initiative	Social inclusion	Case study		Leenders et al., 2011

Target group	Art discipline	Participation	Intervention	Specific outcome	Evidence strength	Comments, limits, negative outcomes	Reference
People with a diagnosis of depression	Literature	Active	Reading group (literature and poetry)	Reduction of depressive symptoms and identification of potential change catalysis factors: literary form and content, group facilitation and group processes	Pre-post study design	Setting was influential: a less-medical drop-in centre (rather than a primary care unit) increased participation level in participants	Dowrick et al., 2012
Mental health care users	Photography and Film	Active	Photography	Self-actualization, reflection and awareness	Narrative review		Sitvast & Springer, 2020
Adults with past mental health difficulties	Literature	Active	Poetry reading and writing	Awareness and connection with inner self, enhanced personal meaning, connection between group members	Qualitative study		Hilse et al., 2007
Youth with a mental condition	Multiple	Active	Creative arts (making a self-box, drawing her goals and a self-portrait, writing a letter to herself)	Facilitated mental health service utilisation, provided the opportunity to help the patient identify possibilities related to the future and review her life.	Case study		Shik, 2013
Hospitalised young patients with eating disorders	Theatre	Active	Theatre workshop based on principles of drama therapy	Reducing defence mechanisms, enabling a patient-centred approach, relieving specific symptoms and improving quality of life during hospitalisation	Observational study		Pellicciari et al., 2013
<b>Neurodevelopmental and neurological disorders</b>							
<b>Autism</b>							
Children with autism	Music	Receptive	Music therapy – customised songs and experimental musical adaptation of an outdoor playground, collaborative delivery by teacher and classroom peers	Customised songs helped peer interactions, the playground adaptation did not lead to better social interaction, but facilitated play and involvement with other participants attracting children to use the instruments.	A single-case experimental design	Collaboration between teachers and children-helpers was found supportive for integrating the intervention in routine and increased peer interactions and meaningful play.	Kern & Aldridge, 2006
Children on the autistic spectrum	Circus	Active	Circus training	Enhance social development and well-being	Qualitative study		Seymour & Wise, 2017
Kindergarten children with autism	Music	Active	Music therapy	Joint attention and social engagement efforts have improved	Mixed-methods study		Vaiouli et al., 2015



Target group	Art discipline	Participation	Intervention	Specific outcome	Evidence strength	Comments, limits, negative outcomes	Reference
<b>Cerebral Palsy</b>							
Children/adolescents with cerebral palsy	Dance	Active	Adapted hip-hop dancing class	Improved quality of life (physical function, transfer and basic mobility, sporting, global function, and symptoms), reduction of emotional and behaviour problems, increased social competence	A pilot, prospective, clinical trial		Withers et al., 2019
<b>Stroke</b>							
Chronic stroke patients	Visual Arts	Active	Drawing, painting, collage, and handcrafts	General well-being, bodily engagement, brain stimulation, rejuvenation experience; enjoyment, self-appreciation, self-expression, social connection with others	Qualitative study		Sit et al., 2017
People with aphasia (Stroke survivors)	Storytelling	Active	Co-construction of stories with medical nurse	Enhanced psychological well-being	Single case study		Bronken et al., 2012
People with aphasia	Photography/Film	Active	Adapted photovoice method for co-designing tools and services for people living with stroke	Useful tool of communication and self-expression for people with aphasia, making the needs of patients more clear to doctors, therapists and designers of tools for people with aphasia. Participation in co-designing items and services found motivating and empowering by participants with aphasia.	Qualitative study	Using a camera might include obstacles for people with aphasia, as their mobility, vision and ability to understand symbols on the camera may be affected by the stroke.	Levin et al., 2007
<b>Other</b>							
People with complex neurological disabilities in long-term care facilities	Theatre	Active	Interactive drama	Appropriate casual leisure occupation for individuals who had mild to severe cognitive and physical disabilities, enjoyment of the rehearsals, a refreshed atmosphere of community spirit, the presence of a state of flow and perceived achievement, positive effect on the connection of staff and residents and learning something new about other people	Service evaluation		Fenech, 2009
Patients with schizophrenia	Dance	Active	Exercising traditional dancing	Improved quality of life and functional capacity	Randomised controlled trial		Kaltsatou et al., 2015

Target group	Art discipline	Participation	Intervention	Specific outcome	Evidence strength	Comments, limits, negative outcomes	Reference
Elders with amnesic mild cognitive impairment	Dance	Active	International Ballroom Dancing classes	Better maintenance of cognitive abilities and performance in regular functionality, mood and behaviour	Randomised controlled trial	A big decline in cognitive function in control group	Lazarou et al., 2017
<b>Dementia</b>							
People with dementia and their caregivers	Music	Active	Online group singing	An increasing number of people are accepting digital interventions, evidence that digital apps can meet social, recreational, and practical needs	Scoping review	Technology use to be adapted to the patients' level and to provide support	Dowson & Schneider, 2021
People with dementia	Theatre	Active	Scripted-IMPROV (semi-improvised drama performance)	Increase of positive aspects of affect/engagement and a decrease in the negative aspects of engagement; For a sub-sample diagnosed with depression, a decrease in depression symptoms	Quasi-experimental study	Quality of life was reported to be higher while participants were in the intervention	Zeisel et al., 2018
People with dementia and family carers	Music	Active	Community Singing	Stress, anxiety and quality of life remained constant from pre to post evaluation, and improved social ties	Pilot evaluation study (mixed-methods, repeated measures design)	A small increase in depression scores, need to focus on dyad of care partners in interventions	Camic et al., 2011
People with dementia	Music	Active	Music therapeutic caregiving	People with dementia seemed to experience care situations as less uncomfortable and joyful as evidenced by a decreased resistant behaviour and an increased positive emotion.	Interventional study	Music therapeutic caregiving might be an effective nursing intervention for people with dementia	Hammar et al., 2011
Elderly with dementia or post-stroke	Music	Receptive and active	Orchestral music-making and listening	Psychological, social, physical and cognitive improvements	Narrative review		Warran & Welch, 2019
Individuals with middle- to late-stage dementia	Visual Arts	Active	Watercolour painting	Improved well-being domains (interest, sustained attention, pleasure, self-esteem and normalcy)	Interventional pre-post study	To adapt to the level of individual functioning	Gross et al., 2015
Individuals with mild to moderate dementia	Storytelling	Active	Digital story making	Support for participants to access their long-term memories	Case study		Critten & Kucirkova, 2019
People with mild to moderate dementia, living in the community	Dance	Active	Person-centred creative dance intervention	Enhancing the engagement and well-being, improved gait, balance confidence, well-being and quality of life, reduced perceived stress of caregiving	Quasi-experimental study	The study emphasizes on the introduction of creative dance intervention into community care	Koh et al., 2020

Target group	Art discipline	Participation	Intervention	Specific outcome	Evidence strength	Comments, limits, negative outcomes	Reference
People with dementia	Storytelling	Active	Group storytelling program	Improved positive affect at one week after the intervention and improved communication skills	Quasi-experimental study	Further constant administration of Time Slips and booster sessions may be required to demonstrate significant differences between treatment and control groups in terms of long-term effects and other outcomes.	Phillips et al., 2010
People with early-stage dementia and their carers	Storytelling	Active	Digital story-making workshop	Social interaction, expression and maintenance of self	Qualitative study	The relationship between participant and facilitator is an important aspect	Stenhouse et al., 2013
Parkinson's Disease							
People with Parkinson's	Music	Active	Music therapy voice and singing intervention	Slight improvements in speech, prevention of deterioration of speech function	Feasibility study (single group repeated measures design)	Lack of control group; larger randomised controlled trials are needed to directly test this study's hypothesis	Elefant et al., 2012
People with Parkinson's	Dance	Active	Argentinian Tango	Participants in the Tango group had significantly reduced disease severity and significantly improved gait, balance and upper extremity function compared to controls.	Randomised controlled trial	Future research should examine subjects both on and off medication to maximise the relevance to daily functioning; neither an intervention nor a control for attention or socialising were provided to the control group. Tango may give better results than other dances because it involves physical and cognitive challenges (eg. backward walking).	Duncan & Earhart, 2012
People with Parkinson's	Music	Active	Group singing	Better quality of life and mental well-being (lower level of the stress, anxiety and perceived stigma and higher social support)	Pre-post design	Similar effects across cultures and gender	Irons et al., 2021
People with Parkinson's disease	Music	Active	Group singing	Improved physical, mood, cognitive functioning, social connectedness, flow-on effects and sense-of-self	Qualitative study	Negative effects related to incapacity to engage based on past abilities and expectations	Abell et al., 2017

Target group	Art discipline	Participation	Intervention	Specific outcome	Evidence strength	Comments, limits, negative outcomes	Reference
People with Parkinson's	Music	Active	Singing	Increased respiratory pressure and quality of life	Experimental pilot study	Many musical therapists involved in the study; variations in medication of the participants might have an influence over the results	Stegemöller et al., 2017
People with Parkinson's disease	Music	Active	Group singing	Increase of neurorehabilitative care in what concerns quality of life, flow could decrease deficits in motor timing and processing of emotions	Text and expert opinion paper		Buetow et al., 2014
Alzheimer's Disease							
Patients with mild Alzheimer's	Multiple	Active	Music and painting	Both singing and painting led to a decrease of pain, anxiety, better digit span, and inhibitory processes, lower anxiety symptoms and higher quality of life Singing – stabilisation of episodic verbal memory Painting- Lower level of depression over time	Randomised controlled trial	Painting more suitable for individuals experiencing introvert needs	Pongan et al., 2017
Individuals in early and middle stages of Alzheimer's disease and their caregivers	Museum	Receptive	'Meet Me at MoMA': Guided tours and Interactive discussion	Positive mood change (early findings)	Interventional study	It is necessary to include more people in order to do statistical analysis.	Rosenberg, 2009
Noncommunicable diseases							
Patients in primary care	Multiple	Active	Creative activities courses through social prescribing	Social and personal benefits, self-management of aspects of health-related conditions, progress related to better mental and/or physical health	Qualitative study (part of a longitudinal study)	Social prescribing programmes to be further developed	Redmond et al., 2019
Patients and health workers	Multiple	Receptive and active	Art therapy, creative art interventions and Arts on Prescription	Physical and mental well-being of people with various conditions including oncologic patients, chronic pain and chronic obstructive pulmonary disease; improved work environment	Literature review		Jensen & Bonde, 2018

Women with chronic fatigue syndrome/myalgic encephalopathy (CFS/ME)	Multiple	Active	Art-making (embroidery, card-making, pottery, tapestry, painting)	Subjective well-being - increased satisfaction in daily life, positive self-image, hope and contact with the outside world	Qualitative study	Creative art-making as part of a more general process of acceptance and adjustment to CFS/ME	Reynolds et al., 2008
<b>Respiratory diseases</b>							
Lung disease patients	Music	Active	Singing	Singing can have positive impact on respiratory health-related quality of life and can improve social participation	Systematic review	To confirm these findings, large-scale randomised controlled trials are suggested	Lewis et al., 2016
People with respiratory diseases	Music	Active	Singing	Physical – respiratory muscle strength, reduction of dyspnea and perceived respiratory symptoms; psychological – increased mood, vitality, social functioning, quality of life, reduced mental pain	Literature review	When teaching a patient with respiratory disease, the singing instructor should learn more about the condition and, if possible, work in conjunction with the appropriate medical care team.	Goldenberg, 2018
People with chronic obstructive pulmonary disease	Music	Active	Group Singing	Psychological – improved confidence and depression scores	Randomised controlled trial	Transition from face-to-face to online delivery, during COVID-19	Philip et al., 2020
Chronic obstructive pulmonary disease	Music	Active	Singing for the intervention group and handcraft artwork (drawing, paper-folding, collages) for the control group	The singing group reported improved maximal respiratory pressure (PEmax); both groups showed improved quality of life	Randomised controlled trial	In addition to singing in class, the singing group also did additional vocalisation and breathing exercises outside of singing class.	Bonilha et al., 2009
Patients with stable chronic obstructive pulmonary disease	Music	Active	Group singing therapy	Decreased depressive symptoms and improved quality of life	Randomised controlled trial	Benefits increase with the duration of therapy, enjoyable and well accepted; It is uncertain whether group singing therapy can be tolerated by patients with severe illness, or whether singing therapy interventions could be helpful for these individuals; The possibility of the outcomes reported here being sustained over time is unknown.	Liu et al., 2019

Chronic obstructive pulmonary disease	Music	Active	Group Singing	Improved exercise capacity, anxiety reduction	Feasibility cohort study	Long-term participation proved feasible	McNaughton et al., 2017
People with chronic respiratory conditions	Music	Active	Group Singing	Acute physiological responses, increased minute ventilation and breath volumes	Non-blinded observational study	Similar to a moderate-intensity physical activity response	Philip et al., 2021
Patients with chronic obstructive pulmonary disease	Music	Active	Community singing	Experiences of improved breathing, relaxation and positive benefits related to the opportunity to create new social connections	Qualitative study	Findings cannot be generalised	Skingley et al., 2018
Adults with chronic obstructive pulmonary disease	Music	Active	Community singing	Self-reported health improvements (breathing, sputum clearance and exercise tolerance) and a sense of improved well-being	Qualitative study	Themes of the possible social mechanisms which contributed to the positive results: right space, connection with others, shared purpose and growth and a meaningful physical activity	McNaughton et al., 2016
<b>Ankylosing spondylitis</b>							
Hospitalised patients with ankylosing spondylitis	Multiple	Active	Traditional Chinese music and painting	Improved recovery and quality of life	Randomised controlled trial	Music therapy suggested as auxiliary treatment. Traditional Chinese music intervention is better than painting and hospitalization in promoting the physical and psychological recovery of patients.	Qin, 2020
<b>Diabetes</b>							
Children with type 1 diabetes	Visual Arts	Active	Interactive drawing	Express body and illness perception, enhance doctor-patient communication	Qualitative study		Vanelli et al., 2018
<b>Cancer</b>							
Cancer patients	Multiple	Active	Creative Art Therapies	Reduced symptoms of anxiety, depression, and pain, improved quality of life	Systematic review	This effect is reduced during follow-up	Puetz et al., 2013
Paediatric cancer patients and their parents	Multiple	Active	Creative arts therapy and music therapy	Improved quality of life	Mixed-methods pilot study		Madden et al., 2010

Cancer patients	Dance	Active	Ballroom dancing	Improved functional exercise capacity; long-term participation associated with a high self-efficacy and active lifestyle	Interventional study pre-post evaluations	No significant effects on fatigue or body image	Thieser et al., 2021
Oncologic patients undergoing chemotherapy	Visual Arts	Active	Painting	Improved quality of life, reduced depression levels	Case-control study	Better effects for patients with no previous experience of painting art therapy	Bozcuk et al., 2017
Advanced cancer patients	Multiple	Active	Painting, pottery, gardening, and woodwork	Learn new methods to cope with limited physical abilities and existential problems in palliative care	Qualitative study		La Cour et al., 2007
Cancer patients	Multiple	Active	Creative art courses	Positive changes in coping with emotions, increased level of creativity, more conscious living, an improved overall quality of life and meaning of life	Interventional study, pre-post design	Mood was not changed	Visser & Op 't Hoog, 2008
Cancer survivors with laryngectomy	Music	Active	Beatboxing workshops	Findings are supportive of the inclusion of beatboxing techniques in voice rehabilitation methods after laryngectomy	Qualitative study		Moors et al., 2020
<b>Other Chronic Conditions</b>							
Patients with chronic structural heart disease	Music	Active	Choir singing	Improved respiratory muscle strength and quality of life	Randomised controlled trial		Ganzoni et al., 2020
Elderly adults with chronic conditions living in low-income housing or senior living communities	Theatre	Active	Community-based theatre activities	Improved health-related quality of life	Mixed-methods study		Yuen et al., 2011
<b>Acute conditions</b>							
Hospitalised children	Multiple	Active	Creative play intervention: Building toys from medical equipment	Positive impact on children and family members' satisfaction, children , gain an active role within the hospital environment, reduce their fear and enabling satisfying experiences	Mixed-methods study	Limitation of the study: the sampling strategy	Teksoz et al., 2017
Children and adolescents hospitalised with acute or chronic conditions	Circus	Receptive and Active	Medical clown interventions for procedural support and as part of routine medical care	Reduction of pain, anxiety and fatigue; improved psychological and emotional reactions and overall well-being	Systematic review		Lopes-Júnior et al., 2020



Hospitalised children and/or their parents	Circus	Receptive and Active	Medical clowns interventions	Reduction of anxiety and stress in patients and their parents	Systematic review		Sridharan & Sivaramakrishnan, 2016
Hospitalised children and their parents	Circus	Receptive and Active	Medical clowns	Reduction of pre-operative psychological stress and anxiety in children, reduction of parents' anxiety	Systematic review and meta-analysis	Limitations of the study: the homogeneity and small size of the sample.	Zhang et al., 2017
<b>Surgery</b>							
Surgical adult patients	Music	Receptive	Recorded music listening	Preoperative anxiety reduction	Systematic review		Bradt et al., 2013
Surgical adult patients	Music	Receptive	Perioperative music listening	Reduction of physiological stress markers, decreased neuroendocrine cortisol stress response to surgery	Systematic review and meta-analysis		Fu et al., 2019
Surgical adult patients	Music	Receptive	Music listening	Postoperative reduced pain, anxiety and use of analgesics, and improved patient satisfaction.	Systematic review and meta-analysis	Music interventions were effective also when patients were under general anaesthetic.	Hole et al., 2015
General population	Music	Active	One hour per day of instrument playing or singing	Reports of better physical and mental health for both men and women than control group. Women making music daily reported less on poor physical or mental health, compared to their control group	Cross-sectional survey		Ekholm et al., 2016
Children undergoing elective surgery	Multiple	Active	Painting/ interactive games	Painting and games resulted in alleviating preoperative anxiety; lower mean anxiety score for children in the painting group	Randomised controlled trial	Suggested as routine medical care	Forouzandeh et al., 2020
<b>Pain management</b>							
Healthy young medical college students	Music	Receptive	Brainwave music listening	Relief of self-reported orthodontic pain, along with brain regularity, small-world properties and improved brain function coherence	Randomised controlled trial	The intervention period was brief, which could have led to bias. Therefore, future research must include long-term follow-up.	Huang et al., 2016

People with long-term health conditions	Music	Active	Group singing	Reduction of pain intensity and interference; psychological and social benefits	Systematic review	Based on the limited, inconsistently-quality information that is now available, singing has only partial proof of reducing some types of pain.	Irons et al., 2020b
Children undergoing blood tests	Music	Receptive	Live music listening	Pain and distress reduction	Randomised prospective controlled trial	Well accepted by children and parents	Caprilli et al., 2007
Cancer patients	Multiple	Active	Creative Art Therapies	Reduced symptoms of anxiety, depression, and pain, improved quality of life	Systematic review	This effect is reduced during follow-up	Puetz et al., 2013
Patients with chronic pain	Music	Active	Group singing	Pain reduction, positive feelings, positive social interaction Increased self-esteem, confidence, motivation and empowerment; bonding experiences and positive social interaction among patients with same condition	Qualitative study	Favourable findings might support the introduction of group singing in pain management programmes	Irons et al., 2020a
Adults	Music	Receptive and active	Entrainment music therapy, receptive music listening, composition of “pain music” and “healing music”	Music can modulate pain perception, which is a promising finding for the study of alternative pain management techniques, Pain coping	Quasi-experimental study	Pain management based on the capability of music to induce both relaxation and distraction	Hauck et al., 2013
Rural women with chronic illness	Multiple	Active	Creative arts (quilting, sewing, and knitting)	Participants in the study reported that the spontaneous adoption of art making (as opposed to an intervention) was likely to improve their ability to cope with chronic illness; The study suggests that art making is a viable complementary therapy for symptom management;	Qualitative study	Use of creative arts as a pain management tool as well as a non-traditional therapy for dealing with chronic illness, art making in this study was entirely spontaneous and self-directed as opposed to an art therapy intervention	Kelly et al., 2012

## 2. Culture and Subjective Well-being

There are multiple definitions of subjective well-being. Ed Diener (2009) defines subjective well-being as 'a person feeling and thinking his or her life is desirable regardless of how others see it' (Diener, 2009). This definition highlights two dimensions, namely thinking and feeling. In our study, we have operationalised the concept of subjective well-being on the basis of four categories identified by Das et al. (2020): (a) fulfilment and engagement theories; (b) personal orientation theories; (c) evaluative theories; and (d) emotional theories (Das et al., 2020).

Fulfilment and engagement theories discuss the influences of an individual's goals, needs and activities on their subjective well-being. Personal orientation theories analyse the influence of temperament on subjective well-being, which dynamically affects fulfilment and engagement, and further leads to the readjustment of personal orientation. Evaluative theories focus on how personal evaluations of life (cognitive dimension) are interconnected with the process of fulfilment and emotions. Theories of emotion show how experiences of emotions (in the context of their affective dimension) are interconnected with the processes of fulfilment, engagement and evaluations (Das et al., 2020).

Some 118 studies have been included in this thematic sub-chapter.

### 2.1 Summary of evidence

#### A. Personal Fulfilment and Engagement

##### Acquiring and developing skills

There is a large evidence base proving that various forms of active cultural participation can enable the acquiring and development of skills such as collaboration and communication (Chang et al., 2019; Eleni & Georgios, 2020; Gao et al., 2021; Pearce & Lillyman, 2015; Barnes, 2014), and technology use (Gilliam et al., 2012).

Among these, development of creative skills can support personal and professional development, as well as an individual's ability to navigate life. Some studies report enhanced creative skills and art-related abilities in the case of children (Kucirkova et al., 2014; Barnes, 2014), youth (Rodgers & Furcron, 2016), older people (Pearce & Lillyman, 2015), medical students (Jones et al., 2017; Nagji et al., 2013), caregivers (Fancourt et al., 2019), patients with cancer (Visser & Op 't Hoog, 2008), mental health service users (Dowrick et al., 2012) and children/adolescents with cerebral palsy (Withers et al., 2019). A systematic review found that participatory photography therapy can enable people with mental illness to work through problematic issues (Buchan, 2020).

##### Self-expression

Activities such as reading, drama, and contributing to a creative arts publication can support self-expression in the case of different population groups (Billington, 2019), college students (Chang et al., 2019), and staff and students of a medical school (Rodríguez et al., 2012). Engaging in photography and filmmaking activities was found to enable self-expression for deaf children and adolescents (Young et al., 2019), while arts and crafts activities allowed self-expression for chronic stroke patients (Sit et al., 2017).

##### Empowerment

Creative activities can contribute to a sense of empowerment for students from disadvantaged groups (Mazza, 2012), hospitalised children (Teksoz et al., 2017) and people with various health conditions (Thieser et al., 2021; Buchan, 2020; Cueva, 2010). They can also support the body engagement and brain stimulation of patients with chronic stroke (Sit et al., 2017).

One study highlighted the empowering quality of engaging people with aphasia in co-designing products and services adapted to their needs, through creative activities such as the use of photography (Levin et al., 2007).

Museum visits and creative workshops enhanced a sense of self-empowerment and the realisation of new meaning in life among participating mental health service users (Jensen, 2018a).

## Increased social engagement, bonding and inclusion

Both receptive (theatre-going) and active (theatre-creating roles, dance and visual arts) cultural participation can contribute to increasing social engagement in elderly people (Meeks et al., 2020; Cantu & Fleuriet, 2018; Brustio et al., 2018). Group singing may facilitate the social engagement of health service workers (Moss & O'Donoghue, 2020) and underprivileged elderly adults (Petrovsky et al., 2020).

Social bonding and inclusion can be promoted through group reading and writing (Billington, 2019; Hilse et al., 2007), singing and music playing (Sun & Buys, 2016; Moss & O'Donoghue, 2020; Petrovsky et al., 2020; Batt-Rawden & Andersen, 2020; Skingley et al., 2018), visual arts (Rose & Lonsdale, 2016; Sit et al., 2017; Saavedra et al., 2018), and a mix of creative activities (Pearce & Lillyman, 2015; Slattery et al., 2020; Dadswell et al., 2020).

Young people engaged in photography activities reported experiencing reduced feelings of social isolation and marginalisation (Charles & Felton, 2020).

## Sense of identity and belonging

Participation in the arts can contribute to an enhanced sense of belonging in adults (Batt-Rawden & Andersen, 2020), older individuals (Meeks et al., 2020) and refugees (Philipp et al., 2015).

Also, a sense of identity might be enhanced in adult women through singing (Batt-Rawden & Andersen, 2020), while participation in theatre and music activities could support people with long-term mental health conditions in experiencing an improved individual and collective identity (Ørjasæter et al., 2017). Long-term inpatient adolescents with chronic pain received support in reshaping their narratives about disabilities through drama and movement therapy (Christie et al., 2006).

## B. Personal Orientation

### Resilience

Singing may support resilience in adults (Sun & Buys, 2016). Creative activities also seemed to improve the resilience of trauma survivors (Diamond & Shrira, 2018), and of young people with social, emotional and behavioural difficulties (Thompson & Tawell, 2017).

The results of a longitudinal cohort study on the effects of an arts on prescription project in adolescents indicated that participation in visual arts workshops (wire sculpting, clay, painting, and collage) led to significant improvements in mental well-being and resilience immediately after participation (Efstathopoulou & Bungay, 2021).

A study suggested creativity as a resilience factor in developing new projects and dealing with postponed affairs for people during the COVID-19 pandemic (Elisondo, 2021). Through art related activities certain people seemed to acquire new abilities and strategies to cope with stressful experiences (Sun & Buys, 2016), self-imposed limitations (Yuen et al., 2011), bullying (Ta Park et al., 2020) and limited physical abilities (la Cour et al., 2007).

### Positive behaviours

Daily reading for pleasure in childhood was associated with positive health-related behaviours during adolescence, such as lower odds of early use of cigarettes and alcohol and higher likelihood of eating two portions of fruit per day, but was also found to be associated with less time spent in certain forms of physical activity (Mak & Fancourt, 2020). A youth development programme based on dance movement was useful in preventing risky behaviours by teaching useful life skills (Rodgers & Furcron, 2016), while an adapted hip-hop dance class was found to reduce certain behaviour problems in children and adolescents with cerebral palsy (Withers et al., 2019). Watching a TV series with age-relevant content informed the behaviour of college students with past experience of school bullying on how to cope with bullying (Ta Park et al., 2020).

Improved decision-making could be observed in college students participating in drama-based therapy groups (Chang et al., 2019).

Participation in dance can promote an active lifestyle and improved functioning of cancer patients (Thieser et al., 2021).

## Empathy

Reading a short fiction text may facilitate development of empathy in university students, in the experiment, self-reported measures of cognitive empathy increased significantly in the case of participants with a low baseline level of "openness" (Djikic et al., 2013). Reading activities have also proven to enhance empathy in adults (Mar et al., 2009; Bal & Veltkamp, 2013).

Active engagement with arts and crafts helped medical staff and students combat compassion fatigue (Anderson & Gustavson, 2016) develop their empathy (Milligan & Woodley, 2009; Baker et al., 2019; Suh et al., 2021), and the perceived ability to act ethically (Zbikowski et al., 2020).

## Confidence and Self-value

Several studies show how cultural engagement can enable an increase in confidence and/or self-value in the case of adolescents (Hansen et al., 2015), young children in drama activities (Gao et al., 2021; Barnes, 2014), elderly people during painting (Rose & Lonsdale, 2016), people participating in choir singing (Batt-Rawden & Andersen, 2020), and people with severe mental health conditions and complex needs involved in various creative activities (Slattery et al., 2020).

The self-esteem and/or self-worth of older adults can be boosted through community based drama activities (Yuen et al., 2011) and creative activities like dancing, drawing and crafts (Pearce & Lillyman, 2015). Through arts, people suffering from certain health conditions (Sit et al., 2017; Gross et al., 2015; Jensen, 2019; Slattery et al., 2020) and those from a disadvantaged background engaging in community arts (Kelaheer et al., 2014) seem to benefit from improved self-acceptance, self-esteem and self-appreciation.

## C. Experiences of Emotions

### Improved mood

There is evidence showing that participants in various cultural activities can benefit from an improved mood. This is the case for people participating in reading groups (Billington, 2019), dance activities (Baltà Portolés, 2021), and patients with health conditions taking part in group singing (Reagon et al., 2016) or in varied art forms in the framework of an arts on prescription programme (Holt, 2020).

Individuals with Alzheimer's disease and their caregivers engaged in guided museum tours and interactive discussions (Rosenberg, 2009) and professional dancers engaged in recreational dance and routine training (Zajenkowski et al., 2015) also benefited from improved mood.

### Positive emotions

Positive emotional experiences supported by receptive and active cultural participation reported by some studies included enjoyment (Sit et al., 2017; Chang & Netzer, 2019; Petrovsky et al., 2020; Winther et al., 2015;), happiness (Cantu & Fleuriet, 2018), hope (Reynolds et al., 2008) and calm (Rose & Lonsdale, 2016; Cantu & Fleuriet, 2018).

### Emotional regulation

Participation in drama related activities was found to increase Positive Affect and decrease Negative Affect and engagement in individuals with dementia (Zeisel et al., 2018). Singing and creative writing were found to improve emotional regulation strategies in both healthy adults and people with mental health conditions (Dingle et al., 2017). Some patients with cancer also reported positive changes in coping with emotions during creative arts courses (Visser & Op 't Hoog, 2008). Engaging in artistic creative activities can lead to improved emotional regulation strategies in healthy individuals, while people with depression can still experience improved emotional regulation strategies, their benefits appear significantly smaller (Fancourt & Ali, 2019). Certain forms of active engagement with art can support awareness and the ability to manage emotions in participants, in the case of primary-school children (Moula, 2021) and early age dual language children (Gao et al., 2021).

## Reduced anxiety and depression

Research findings showed some beneficial effects on anxiety and depression for older people (Coulton et al., 2015) and for patients with chronic health conditions (Reagon et al., 2016) who participated in group singing. Participation in dance activities might contribute to reducing depression and anxiety symptoms (Baltà Portolés, 2021). Involvement in drama improvisation was also found to reduce depression in people with dementia with depression symptoms (Zeisel et al., 2018). Certain forms of active engagement such as singing and visual arts making can help reduce depression levels in adults (Sun & Buys, 2016), health service workers (Moss & O'Donoghue, 2020) and oncological patients undergoing chemotherapy (Bozcuk et al., 2017). Listening to music was found to help decrease stress and anxiety in university students (Fiore, 2018). Medical clown interventions were found effective in reducing stress and anxiety around medical procedures in hospitalised children, adolescents and their parents (Sridharan & Sivaramakrishnan, 2016; Zhang et al., 2017; Lopes-Júnior et al., 2020).

In contrast with other studies, a wide population study showed a slight but consistently stronger relationship between the receptive cultural activities and lower anxiety and depression scores in both women and men than in the case of active participation (Cuyper et al., 2012).

## Reduced stress, improved relaxation and flow

Viewing a visual artwork can contribute to the reduction of stress (Law et al., 2021). Aesthetic experiences related to visiting a cultural heritage were also found to enable stress reduction (gauged by a lowering in cortisol levels) (Grossi et al., 2018). Listening to music helped reduce stress in students (Fiore, 2018) and children undergoing blood tests (Caprilli et al., 2007). Tension and stress release was reported by participants (wives and family members of military personnel) in choir singing activities (Clift et al., 2016). Working adults creating an artwork with natural materials reported a certain stress relief (Chang & Netzer, 2019). Another study showed that singing contributed to a perceived improved ability to cope with stress in adults, even if a direct reduction of psychological stress was not observed (Sun & Buys, 2016). However, competitive contexts such as dance contests may induce stress and could lower the well-being benefits of art practitioners, when compared with recreational dance situations (Zajenkowski et al., 2015). An arts on prescription programme proposing participation of people dealing with anxiety, depression, social isolation or chronic pain in varied art forms proved effective in reducing tension during and after participation (Holt, 2020).

Participation in community singing activities facilitated relaxation in people with chronic obstructive pulmonary disease (Skingley et al., 2018), while engaging in visual arts activities brought calm to elderly people (Rose & Lonsdale, 2016; Cantu & Fleuriet, 2018).

One study found that sketching during a creative process increased the experience of flow (Cseh et al., 2016).

## Bereavement support

Storytelling was found to enable terminally ill cancer patients and their families to process the diagnosis (DeSanto-Madeya et al., 2021) and helped to support bereaved parents through their mourning processes (Bosticco & Thompson, 2005; Xiu et al., 2020).

## D. Personal Evaluations of Life

### Improved well-being and quality of life

Several studies reported benefits at the level of general and psychological well-being (Yuen et al., 2011; Cantu & Fleuriet, 2018; Waddington-Jones et al., 2019; Brewster & Cox, 2019; Clift et al., 2016; Jensen et al., 2020). Improvements in the well-being of people with various health conditions were also observed (Lopes-Júnior et al., 2020; Crone et al., 2018; Gross et al., 2015; Saavedra et al., 2018; Sit et al., 2017; Crone et al., 2013; Bronken et al., 2012; Reynolds et al., 2008). A scoping review on the contribution of heritage and heritage related interventions on well-being reports on a range of physical, mental, and social well-being benefits for individuals living in or engaged with activities at historical places (Pennington et al., 2019). Aesthetic experiences related to visiting a cultural heritage site were reported to have increased well-being (Grossi et al., 2018).

There are several studies showing that receptive and active cultural participation contribute to an improved quality of life in people of various ages and backgrounds (Fraser et al., 2015; Sun & Buys, 2016; Brustio et al., 2018; Xiu et al., 2020).

Health-related quality of life was also cited as an outcome for patients with chronic health conditions engaged in art activities (Reagon et al., 2016; Qin, 2020; Liu et al., 2019; Daykin et al., 2018; Yuen et al., 2011; Madden et al., 2010; Bozcuk et al., 2017; Visser & Op 't Hoog, 2008).

## Life satisfaction and motivation

Life satisfaction was improved by engagement with art in the case of adolescents (Hansen et al., 2015), adults (Cuypers et al., 2012), hospitalised children (Teksoz et al., 2017) and women with chronic fatigue (Reynolds et al., 2008). Engagement in community arts facilitated an increased quality and enjoyment of life for new refugees and asylum seekers (Philipp et al., 2015). Engaging in creative dance improved satisfaction with life in older women (Cruz-Ferreira et al., 2015). Heritage sites and associated activities can contribute to people's satisfaction with life (Pennington et al., 2019).

Participation in creative activities can also facilitate an increased motivation in children with language and socio-emotional difficulties (Kucirkova et al., 2014) and people with aphasia (Levin et al., 2007).

## The finding of meaning

There is some evidence that reading can support the finding of meaning in individuals (Billington, 2019). Creative engagement was found to facilitate a sense of meaning in people with cancer (Visser & Op 't Hoog, 2008) and mental health difficulties (Hilse et al., 2007), and supported bereaved parents in sense-making (Bosticco & Thompson, 2005).

## Improved knowledge and reflectivity

Participation in creative activities enabled reflection about self and others, and life experiences in primary-school-aged children (Moula, 2021), deaf children and adolescents (Young et al., 2019), medical students (Jones et al., 2017) and working adults (Chang & Netzer, 2019). Early-age children involved in dance and organised movement benefited from self-awareness as cognitive, social and emotional beings (Thom, 2010).

Young people benefited from improved knowledge about healthy lifestyles and attitudes through watching age-appropriate TV drama (Ta Park et al., 2020) and playing transmedia games (Gilliam et al., 2012).

Digital story making supported critical thinking and offered the opportunity to think deeply about a topic or theme among minority youth, which proved supportive in youth health promotion (Fletcher & Mullett, 2016).

## Different ways of engaging with arts and culture activities

Within this chapter on Culture and Subjective Well-being, 93 (79 per cent) of the 118 studies included referred to active forms of cultural engagement, 13 (11 per cent) to receptive participation and 12 (10 per cent) of them were concerned with general cultural participation involving both receptive and active forms.

- Drama-based active participation (acting classes, improvisation) tended to support cooperation and communication skills, social engagement, self-expression, confidence and positive mood;
- Dance encouraged social competences and the reduction of risk behaviours in youth, and enabled positive emotions;
- Reading was associated with empathy, the finding of meaning and the reduction of risk behaviours, while writing supported social connection;
- Watching films and video content facilitated knowledge acquisition and relaxation;
- Viewing an artwork could reduce stress, while active engagement in visual arts activities enabled self-expression, self-reflection, self-value, social engagement and helped to overcome communication barriers;
- Listening to music was associated with pain and stress reduction;
- Singing was associated with positive emotional outcomes, social engagement and connection, and increased well-being;
- Heritage was also reported to contribute to well-being.

Several studies mentioned that art-based interventions were well received by the people in the target groups.



## 2.2 Included studies

Target group	Art discipline	Participation	Intervention	Specific outcome	Type of study	Comments, limits, negative outcomes	Reference
Children and Youth							
Primary-school children with mild emotional and behavioural difficulties	Multiple	Active	School art therapies - music therapy, art therapy, dance movement therapy and drama therapy	Increase in awareness about feelings and mood changes, reflections on emotions and thoughts about self and others, emotional relief and positive feelings, empowerment, self-acceptance	Pilot randomised controlled study with embedded qualitative and arts-based methods	Story making, storytelling, drawing, puppetry, song writing and empowerment activities had the greatest impact on children's health and well-being.	Moula, 2021
Young children, pre-school and primary school students	Dance	Active	Community dance programme (creative activities centre)	Positive effect on social relations: improved collaboration and communication skills	Interventional study, pre-post design		Eleni & Georgios, 2020
Preschool children	Dance	Active	Creative movement in preschool curricula	Integrated sense of body and emotion, self-awareness as cognitive, emotional and social being	Literature review		Thom, 2010
Adolescent	Storytelling	Active	Transmedia games	Improved artistic, technological and communication skills	Review article		Gilliam et al., 2012
Adolescents	Multiple	Receptive and active	Book reading, music listening, playing an instrument, meeting and training, visiting a library and cinema, playing theatre, attending music or sports events and choir singing	Better reported health, life-satisfaction and self-esteem	Cross-sectional study	Frequency of participation was found impactful, routine participation being associated with better reported outcomes.	Hansen et al., 2015
Adolescents	Visual Arts	Active	Arts on Prescription: wire sculpting, clay, painting, and collage	Improved mental well-being and resilience	Longitudinal cohort study	Significant improvements immediately after participation, though the effects were not sustained after three months	Efstathopoulou & Bungay, 2021
Children with language and socio-emotional difficulties	Storytelling	Active	Creation of digital stories using a story making app	Increased motivation to engage in communication and literacy-related activities, improved story-sharing and story-creation abilities	Case studies		Kucirkova et al., 2014

Target group	Art discipline	Participation	Intervention	Specific outcome	Type of study	Comments, limits, negative outcomes	Reference
Children with communication difficulties	Theatre	Active	Shared personal stories through drama sessions	Improved well-being, positive effects on speaking and listening skills, motivation and confidence, improved attitude, behaviour and relationships	Observational study	Improved well-being of the involved teaching assistants.	Barnes, 2014
Deaf children and adolescents	Photography and Film	Active	Photography and filmmaking	Enhanced resilience - reflexivity over life experiences, reappraisal of self-abilities, new means for self-expression and communication while overcoming ordinary sign-language barriers	Qualitative study		Young et al., 2019
Disadvantaged middle-school-age youth	Multiple	Active	Art and athletics summer camp: creative writing, athletics training, arts and leadership skills	Sense of empowerment, hope for personal and educational development.	Qualitative study		Mazza, 2012
Minority youth and elderly	Multiple	Active	Digital story making	Supported critical thinking, opportunity to think deeply about a topic or theme; connected youth and elders in discussions about healthy living; enhanced relationships between elderly and youth	Qualitative study	The processes had to be adjusted constantly to meet the changing needs of the youth.	Fletcher & Mullett, 2016
Children/Adolescents	Literature	Active	Daily reading for pleasure	Reading most days for pleasure in childhood (age 11) associated with better health-related behaviours in early adolescence (age 14) - lower odds of early onset of cigarette and alcohol use and a better fruit consumption	Longitudinal cohort study	Daily reading is associated with lower levels of physical activity.	Mak & Fancourt, 2020
Youth	Dance	Active	Youth dance programme - dance movement	Improved competence in important life skills. The programme was found useful in preventing risky behaviours by teaching useful life skills.	Quasi-experimental study		Rodgers & Furcron, 2016
Young people	Photography/Film	Active	Photography	Overcoming social isolation, marginalisation, and stigma	Qualitative study		Charles & Felton, 2020
University students	Creative processes	Active	Sketching - visual creative process simulation	Sketching during the creative process facilitates flow by decreasing perceived effort	Experimental study		Cseh et al., 2016

Target group	Art discipline	Participation	Intervention	Specific outcome	Type of study	Comments, limits, negative outcomes	Reference
College/university students	Music	Receptive	Online music listening	Decreased stress and anxiety	Pilot study	Melody and tempo were the most supportive musical elements	Fiore, 2018
College students	Theatre	Active	Drama therapy during counselling groups for high-risk students	Improved decision-making, self-awareness, interpersonal and communication skills, self-expression, self-cognitive reconstruction, and social role ability	Experimental study	Self-awareness and decision-making was more positively influenced in males than females	Chang et al., 2019
University students	Literature	Active	Reading a fictional short-story or a non-fictional essay	Participants low in "openness" (a Big-Five dimension of personality) reading a short story self-reported significant increases in cognitive empathy, but not in affective empathy. Scores for non-self-reported measures of empathy were higher for frequent fiction-readers.	Experimental Study	Participants with a high baseline level of "openness" reported lower cognitive empathy	Djicic et al., 2013
College students	Photography and Film	Receptive	Watching Korean drama (K-drama)	Improved knowledge on school bullying, and improved behaviour to cope with bullying for those who had been victims of school bullying.	Mixed-methods study	Significant effect on knowledge, attitude and behaviour only in individuals with depressive symptoms or past anxiety.	Ta Park et al., 2020
Early childhood in Dual Language Learners	Theatre	Active	Creative drama	Improved cooperation skills, emotion management, social interactions, and increased level of confidence	Mixed-methods case study		Gao et al., 2021
<b>Adults</b>							
Adults	Music	Receptive and Active	Music and singing	Music and singing - improved well-being and reduced depression in adults, along with reduced isolation in older adults; group singing – enhanced well-being and quality of life for adults with chronic conditions	Systematic review		Daykin et al., 2018

Target group	Art discipline	Participation	Intervention	Specific outcome	Type of study	Comments, limits, negative outcomes	Reference
Adults	Music	Receptive	Singing bowl therapies	Improvements in blood pressure, heart rate, respiratory rate, peripheral capillary oxygen saturation, cutaneous conductance and anterior-frontal alpha values; benefits on distress, positive and negative affect, anxiety, depression, fatigue, tension, anger, confusion and vigour	Systematic review	Given the limited number of studies, singing bowls therapies are not recommended at this point.	Stanhope & Weinstein, 2020
Adults	Heritage	Receptive	The aesthetic experience of visiting a cultural heritage site	Impact on individual physical and mental health: stress reduction (cortisol levels) and well-being increase	Experimental study		Grossi et al., 2018
Multiple	Literature	Active	Reading groups	Improved mood and mental states, social bonding and inclusion, self-expression, finding of meaning and increased theory of mind	Literature review		Billington, 2019
Multiple	Dance	Active	Dance classes, movement therapy	Improved mood and reduced depression and anxiety symptoms, pain relief, enhanced physical functioning, improved quality of life, improved social inclusion and bonding	Review		Baltà Portolés, 2021
General population	Music	Active	Choir and singing groups	Improved respiratory and cardiovascular function, improved cognitive function, improved psychological well-being, improved social inclusion and bonding	Systematic review		Hagemann, 2021
General population	Visual Arts	Receptive	Viewing a visual artwork	Stress reduction, systolic blood pressure reduction	Scoping review		Law et al., 2021
Adults	Music	Receptive	Listening to four types of music differing on valence and arousal	Participants who listened to 'happy music' reported higher divergent creativity compared with the control group (silence).	Randomised controlled trial	No effect of music listening on convergent creativity.	Ritter & Ferguson, 2017

Target group	Art discipline	Participation	Intervention	Specific outcome	Type of study	Comments, limits, negative outcomes	Reference
Children, adolescents, adults and elderly	Multiple	Receptive and active	Music listening, classes and music therapy groups, choral singing, dance classes, visual art making, museum visits, reading groups, theatre educational workshops, clowning, Arts on Prescription	Children and youth - mental health benefits from participation in theatre, dance and music; Working adults - improved mental health and well-being from participation in nature activities, choral singing, shared reading groups and arts on prescription programmes; Elderly - improved quality of life, social contact and increased their mental health and well-being through theatre, music, music-based caregiving, museum visits, reminiscence dance, and use of clowns.	Scoping review	Not everyone is eager to engage and respond positively to arts activities. A sense of feeling deflated can appear once the intervention has ended.	Jensen et al., 2020
Adult participants	Multiple	Receptive and Active	Participation in cultural activities	Good health, good satisfaction with life, low anxiety and depression scores. For women, the association between active cultural participation was stronger with perceived health, while in men attending receptive cultural activities was more strongly associated with all health-related outcomes	Population-based study	Light and consistent stronger relationship between anxiety, depression and satisfaction with life and receptive cultural activities in both genders	Cuypers et al., 2012
General population	Heritage	Receptive and active	Heritage / historic places and assets (museums, archives, cathedrals, historic houses, residential areas, heritage landscapes, archaeological sites) and associated interventions	Beneficial impacts on the physical, mental, and social well-being of individuals (e.g. increased confidence, social connection and life satisfaction) and communities (e.g. social relations, sense of pride and belonging, empowerment)	Scoping Review	Observed negative effects are often related to inadequate design and delivery in relation with the needs of the target groups.	Pennington et al., 2019
Pregnant women	Music	Active	Singing and music listening	Positive immediate effects on emotional state, stress (cortisol) and bonding (oxytocin); short-term effects on general self-efficacy and perceived closeness to the unborn child, with better results in the case of singing.	Randomised controlled trial	No significant effects for depressive symptoms and the mother–infant bonding questionnaire	Wulff et al., 2021b

Target group	Art discipline	Participation	Intervention	Specific outcome	Type of study	Comments, limits, negative outcomes	Reference
Adults	Music	Active	Singing	Lowered depression levels, increased quality of life, resilience, social support, and social connectedness, better management of mental health conditions, perceived ability to cope with stressful experiences	Quasi-experimental study	No direct decrease of psychological stress	Sun & Buys, 2016
Adults	Literature	Active	Fiction reading	Enhanced empathy skills, positively correlated with social support,	Cross-sectional study		Mar et al., 2009
Adults	Literature	Active	Fiction reading	Enhanced empathy	Experimental study		Bal & Veltkamp, 2013
Adult women	Music	Active	Choir singing	Choral singing can influence women's perceptions of their well-being in four ways: (1) through the enjoyment of singing; (2) believing singing to be necessary for survival; (3) using group singing as a means of social connection, which enhanced a sense of belonging and identity, increasing self-confidence and self-esteem; and (4) by encouraging social inclusion.	Qualitative study		Batt-Rawden & Andersen, 2020
Adults	Photography/ Film	Active	Photo-a-day practice	Supported well-being	Observational study	Required access to technology (smartphone, camera)	Brewster & Cox, 2019
People with developmental disabilities	Multiple	Active	Creative Arts Therapies Center: drama, music, painting, dancing, movement as therapy	Creative Arts Therapies Centres can challenge the preconceived ideas of the audience about developmental disabilities and can improve social integration, quality of life, and self-worth of people with developmental disabilities	Case study	Recommendations for a Creative Arts Therapies Center in terms of committed people, financing, housing, staffing, professional links and community	Lister et al., 2009
Participants from disadvantaged backgrounds (incl. primary school students, youth, women and women prisoners)	Multiple	Active	Community arts (theatre, dancing, circus)	Improved mental health and well-being outcomes, the climate of the arts organisations enabled the outcomes	Mixed-methods study	Differences between the arts organisations and the programmes evaluated.	Kelaher et al., 2014
General population during COVID-19 lockdown	Video	Receptive	Watching a forest-themed video	Stress reduction and short-term anxiety decrease	Experimental study	No long-term benefits	Zabini et al., 2020
Adults in workplace							



Target group	Art discipline	Participation	Intervention	Specific outcome	Type of study	Comments, limits, negative outcomes	Reference
Health service workers	Music	Active	Work-place choir	Improved self-perception of mental health and decreased depression rates, enhanced social connectedness, personnel engagement and enjoyment	Mixed-methods study	Only a limited segment of the staff, in general with good health and well-being, engaged in attending a work-place choir. Quantitative results are not statistically relevant.	Moss & O'Donoghue, 2020
Students, faculty, and staff of a medical school	Writing	Active	Creation of a creative arts journal	Creative arts publications in the journal encouraged self-expression and strengthened professional relationships.	Qualitative study		Rodríguez et al., 2012
Medical students	Visual Arts	Active	Narrative-based programme	Enhanced reflection on past experiences, personal growth and development, self-discovery, awareness of art as an important tool, enhanced sense of collaboration, enhanced reflection on the human side of illness and medical care, noticeable awareness over the people who experience an illness	Qualitative study		Jones et al., 2017
Healthcare staff	Theatre	Active	Drama intervention - improvisation role-play workshops based Forum Play	Perceived increase in ability to act according to own moral beliefs regarding abuse in healthcare, no change in the number of reported abuse cases within one year	Interventional study, pre-post design		Zbikowski et al., 2020
Medical students	Theatre	Active	Theatre-based study module	Positive effects on well-being, growth and development as individuals and future physicians, enhanced relationships with peers	Qualitative study		Nagji et al., 2013
Paramedic students	Literature	Active	Writing - creative-expressive tasks	Insight, empathy, relational awareness, heightening ethical sensibilities	Qualitative study		Milligan & Woodley, 2009
Nursing students	Dance	Active	Dance and body movement	Dance and body movement lessons and practice as a promising ground for development of embodied communication with patients; dance facilitated trust, joy, openness, bonding, self-contact and somatic awareness	Qualitative study		Winther et al., 2015

Target group	Art discipline	Participation	Intervention	Specific outcome	Type of study	Comments, limits, negative outcomes	Reference
Nurses	Crafts	Active	Knitting	Helped to manage stressors, combat compassion fatigue, process difficult work situations, decrease in <b>burnout scores</b>	Pre-post design		Anderson & Gustavson, 2016
Professional dancers	Dance	Active	Recreational, ordinary training and competitive dance	Positive mood change	Experimental study	Dance competition may induce stress and decrease level of enjoyment	Zajenkowski et al., 2015
Urban working adults	Visual Arts	Active	Indoor creative expression with conventional and nature-sourced materials	Accounts of work-related stress relief, enjoyment of the sensory experience, playful and creative behaviour and reflection on life aspects besides work when using natural materials as a symbolic reconnection to nature	Qualitative study		Chang & Netzer, 2019
Wives and partners of personnel of armed forces	Music	Active	Choir singing	Personal and social benefits - more friends, increased personal confidence, development of new skills, enhanced sense of personal identity (for most participants), Health and well-being benefits - general improvements in well-being, tension and stress release, coping with military life related stresses, confidence and morale, help with serious mental health conditions and social support when going through serious physical illness	Cross-sectional survey	Challenges for participants may appear in relation to the choice of repertoire, the number and intensity of performances, and relational issues possibly connected to the military context.	Clift et al., 2016
<b>Elderly People</b>							
Elderly people	Multiple	Receptive and active	Music (singing or instrumental), flora therapy, cloth mural creation; painting or drawing, dance; theatre or drama; writing or narrative (prose, poetry, storytelling); and photography or film	Quality of life	Scoping review	There was thought to be a need to initiate programmes of research instead of singular study teams	Fraser et al., 2015

Target group	Art discipline	Participation	Intervention	Specific outcome	Type of study	Comments, limits, negative outcomes	Reference
Older people	Music	Active	Community group singing compared with usual activities	Significant positive effects of singing on mental health related quality of life compared with usual activities, no differences on physical aspects of quality of life, anxiety or depression six months after randomisation; significant positive differences in measures for mental health related quality of life, anxiety and depression at three months post randomisation.	Randomised controlled trial	Compared to usual activities, group singing proved marginally more cost-effective.	Coulton et al., 2015
Adults aged over 52	Multiple	Receptive	(1) Visiting museums/galleries/exhibitions, (2) going to theatre/concert/opera, and (3) going to cinema	These forms of receptive cultural engagement were associated with slowing of decline in cognitive function (memory and semantic fluency) over 10 years, more frequent participation being associated with greater effects.	Cross-sectional Study	Cinema visits were found to have little effects on cognition	Fancourt & Steptoe, 2018
Healthy elderly adults	Music	Active	Playing a musical instrument	May assist in preserving cognitive function in community-dwelling older adults	Post hoc observational analysis	Results need to be confirmed in a clinical trial	Mansky et al., 2020
Elderly adults	Music	Active	Collaborative composition workshop	Positive impact on subjective and psychological well-being	Interventional study, pre-post design		Waddington-Jones et al., 2019
Elderly people	Theatre	Receptive	Attending live theatre performances	Through the psychosocial advantages of flow, social engagement, and belonging, theatre involvement was indirectly associated with satisfaction and enjoyment of the theatre, hedonic well-being, and social functioning	Mixed-methods study		Meeks et al., 2020

Target group	Art discipline	Participation	Intervention	Specific outcome	Type of study	Comments, limits, negative outcomes	Reference
Older adults	Theatre	Active	Playback theatre groups	The research presents three categories, each of which corresponds to one of three possible transformative paths that encouraged social and creative participation. It was discovered that the procedure had the ability to make two contributions that are seen to be pillars for maintaining older individuals' positive identity: preserving continuity and encouraging personal development	Qualitative study		Keisari et al., 2020
Older adults in residential care home	Multiple	Active	Reminiscence arts, seated dance, and orchestral music	Social connectedness and bonding with caregivers, increased interaction and communication, improved sense of quality of care	Qualitative study		Dadswell et al., 2020
Elderly people	Theatre	Active	Acting classes	Improved general and psychological well-being, increased sense of self-advocacy and self-worth, coped with self-imposed limitations and improved health-related quality of life	Mixed-methods study		Yuen et al., 2011
Latino Elderly	Dance	Active	Latin dancing classes	Cognitive function	Pilot randomised controlled trial		Marquez et al., 2017
Old and older age people	Visual Arts	Active	Participatory painting programme: re-imagining a landscape	Improved levels of confidence, self-value, feelings of safety, calm and tranquillity, reconnection of the present with the past. A means to enhance connectedness and sharing	Qualitative study		Rose & Lonsdale, 2016
Older adults	Multiple	Active	Art classes including drawing, painting, creative writing, and mixed media	Well-being and influence over the health of the brain by stimulating a stronger ability to focus	Pre-post survey study		Cantu & Fleuriot, 2018
Elderly people	Dance	Active	Dance classes	Positive effects on mobility performance, improvement of quality of life and social engagement	Pre-test–post-test study	Dance as a feasible form of physical training (not expensive, suitable and adaptable to older adults)	Brustio et al., 2018

Target group	Art discipline	Participation	Intervention	Specific outcome	Type of study	Comments, limits, negative outcomes	Reference
Elderly people	Theatre	Active	Playback Theatre	Perceived increased emotional well-being	Pre-post study design		Chung et al., 2018
Elderly women	Dance	Active	Creative dance	Beneficial effects on physical fitness and life satisfaction; might play an important role in the prevention of falls	Randomised controlled trial	Small sample size and the results cannot be generalized	Cruz-Ferreira et al., 2015
Older people from rural communities	Multiple	Active	Creative arts projects: dance, film, painting, drawing, crafts	Increased self-esteem and level of self-worth, development of new skills, making new social connections, especially collaborating with a different generation	Cross-sectional study		Pearce & Lillyman, 2015
Elderly adults from low socioeconomic status	Music	Active	Choir singing	Joy, enjoyment, social engagement and connection	Qualitative study	Requirement to consider other group members' talent and musical preferences that may limit one's feelings of comfort	Petrovsky et al., 2020
<b>Refugees and Holocaust survivors</b>							
Holocaust survivors	Multiple	Active	Engagement in at least one type of art: music, writing, plastic art, drama	Improved resilience	Quasi-experimental study	PTSD symptoms did not significantly differ among those engaged in art and those who did not.	Diamond & Shrira, 2018
New refugees, immigrants, and asylum seekers	Multiple	Receptive and active	Community arts installation event	Raised awareness on the role of arts in community, support sense of community belonging, enjoyment of life	Qualitative study		Philipp et al., 2015
<b>Well-being and quality of life for people with health problems</b>							
Patients with chronic health conditions	Music	Active	Group singing	Beneficial effects on mood, depression, anxiety, health related quality of life	Mixed-methods systematic review		Reagon et al., 2016
Hospitalised patients with ankylosing spondylitis	Multiple	Active	Traditional Chinese music and painting	Improved recovery and quality of life	Randomised controlled trial	Music therapy suggested as auxiliary treatment Traditional Chinese music intervention is better than painting and hospitalization in promoting the physical and psychological recovery of patients.	Qin, 2020

Target group	Art discipline	Participation	Intervention	Specific outcome	Type of study	Comments, limits, negative outcomes	Reference
Patients with stable chronic obstructive pulmonary disease	Music	Active	Group singing therapy	Decreased depressive symptoms and improved quality of life	Randomised controlled trial	Benefits increased with the duration of therapy, enjoyable and received well, not certain if group singing therapy are suitable for patients with severe illness	Liu et al., 2019
Patients with chronic obstructive pulmonary disease	Music	Active	Community singing	Experiences of improved breathing, relaxation, and positive benefits related to the opportunity to create new social connections	Qualitative study	Findings can not be generalised to entire population	Skingley et al., 2018
Patients with chronic obstructive pulmonary disease	Music	Active	Community singing	Self-reported health improvements (breathing, sputum clearance and exercise tolerance) and a sense of improved well-being	Qualitative study	Themes of the possible social mechanisms which contributed to the positive results: right space, connection with others, shared purpose and growth and a meaningful physical activity	McNaughton et al., 2016
Individuals with dementia	Theatre	Active	Abstract Scripted-IMPROV (semi-improvised drama performance)	Increase of positive aspects of affect and engagement, and decrease in negative aspects of engagement; for a sub-sample diagnosed with depression, a decrease in symptoms	Quasi-experimental study	Quality of life was reported to be higher while participants were in the intervention	Zeisel et al., 2018
People with dementia and their caregivers	Music	Active	Online group singing	Growing acceptability and evidence of efficacy of digital interventions	Scoping review	Technology use to be adapted to the patients' level and to provide support	Dowson & Schneider, 2021
Individuals with middle-to late-stage dementia	Visual Arts	Active	Watercolour painting	Improved well-being domains (interest, sustained attention, pleasure, self-esteem and normalcy)	Interventional pre-post study	The programme should be adapted to level of individual functioning; well-being evaluation may vary according to the assessors' subjectivity and the interpretation of participant's behaviour	Gross et al., 2015
People with mental health conditions	Photography and Film	Active	Participatory Photography as therapy	Support in dealing with problematic issues, an enhanced sense of empowerment, enhanced therapeutic relationships, mental processing, peer support, expressing creativity, sense of achievement, enjoyment	Systematic search and literature review	Ethical issues that may arise with taking photographs of identifiable people; limited evidence	Buchan, 2020



Target group	Art discipline	Participation	Intervention	Specific outcome	Type of study	Comments, limits, negative outcomes	Reference
Individuals with and without depression	Multiple	Active	Performing arts, visual arts, literature-related exercises, craft and design, digital, electronic and online art	Lower general use of self-reported emotional regulation strategies (approach and self-development strategies) when engaging in arts for people with depression, yet they still reported benefits on positive emotional regulation	Cross-sectional study		Fancourt & Ali, 2019
Adults with mental health conditions and healthy adults	Multiple	Active	Choir singing and creative writing	Increased experience of positive emotions, decreased experience of negative emotions in both healthy adults and people with a mental health condition involved in art-based groups. experimental and control groups	Interventional study, repeated measures design	The fact that participants had been members of the groups for different durations could influence the emotion ratings	Dingle et al., 2017
People with long-term mental health conditions	Multiple	Active	Theatre and music workshop	Improved experience of individual and collective identity	Qualitative study		Ørjasæter et al., 2017
People with severe mental health conditions and complex needs	Multiple	Active	Individual artwork, poetry writing, dance, play musical instruments, created a mural, wrote a song	Improved confidence, feeling valued, connectedness, self-acceptance, understanding of own mental health problems, creating hope	Longitudinal qualitative study	Writing was the least popular; Group work raised tensions due to individual preferences	Slattery et al., 2020
Individuals with severe mental health conditions	Multiple	Active	Creative workshops: painting, drawing, collage, sculpture, printmaking	Improved social inclusion with a significant size effect and psychological well-being with a low size effect	Mixed-methods study (repeated measures design)	Impact may be increased by changing workshop's location from clinical settings to public space together with individuals without a diagnosis of severe mental illnesses	Saavedra et al., 2018
Adults with mental health conditions	Multiple	Active	Arts on Prescription: poetry, ceramics, drawing, mosaic, and painting	Improvements in well-being	Observational study		Crone et al., 2013
Adults with mental health conditions	Multiple	Active	Arts on Prescription: poetry, ceramics, drawing, mosaic, and painting	Improvements in well-being	Observational study		Crone et al., 2018

Target group	Art discipline	Participation	Intervention	Specific outcome	Type of study	Comments, limits, negative outcomes	Reference
Adults with mental health conditions	Multiple	Receptive and active	Arts on Prescription - choir singing, guided reading, introduction to the city archives, music listening, museum and theatre visits, nature hike	Increased energy, motivation and self-esteem, improved self-awareness, higher sense of joy, reduced panic attacks, higher understanding of their needs and a better level of self-care, a higher alignment to the labour market	Qualitative study		Jensen, 2019
Adults with mental health conditions	Museum	Active and receptive	Guided museum visits followed by painting & sculpture workshop	Empowerment and meaning in life	Qualitative study	The positive influence of the museum visits was not evident in all museums and was impacted by the interaction with the tour guide	Jensen, 2018a
People with a diagnosis of depression	Literature	Active	Reading group (literature and poetry)	Reduction of depressive symptoms and identification of potential change catalysis factors: literary form and content, group facilitation and group processes	Pre-post study design	Setting was influential: a less-medical (rather than a primary care unit) increased participation level in participants	Dowrick et al., 2012
Adults who had mental-health problems in the past	Literature	Active	Poetry reading and writing	Awareness and connection with inner self, enhanced personal meaning, connection between group members	Qualitative study		Hilse et al., 2007
Indigenous individuals with mental health conditions living in remote areas	Visual Arts	Active	Exhibition, community-based Arts in Health initiative	Social inclusion	Case study		Leenders et al., 2011
Individuals in early and middle stages of Alzheimer's disease and their caregivers	Museum	Receptive	'Meet Me at MoMA': guided tours and interactive discussion	Positive mood change (early findings)	Interventional study	It is necessary to include more people in order to do statistical analysis.	Rosenberg, 2009
Children with autism	Music	Receptive	Experimental musical adaptation of the outdoor playground	Increased peer interactions	Single-case experimental design	Social interactions with other children did not improve	Kern & Aldridge, 2006
Children and adolescents with cerebral palsy	Dance	Active	Adapted hip-hop dancing class	Improved quality of life (physical function, transfer and basic mobility, sporting, global function, and symptoms), reduction of emotional and behaviour problems, increased social competence	Pilot, prospective, clinical trial		Withers et al., 2019

Target group	Art discipline	Participation	Intervention	Specific outcome	Type of study	Comments, limits, negative outcomes	Reference
Children and adolescents hospitalised with acute or chronic conditions	Circus	Receptive and active	Medical clown interventions for procedural support and as part of routine medical care	Reduction of pain, anxiety and fatigue; improved psychological and emotional reactions, and overall well-being	Systematic review		Lopes-Júnior et al., 2020
Hospitalised children and/or their parents	Circus	Receptive and active	Medical clowns interventions	Reduction of anxiety and stress in patients and their parents	Systematic review		Sridharan & Sivaramakrishnan, 2016
Hospitalised children and their parents	Circus	Receptive and active	Medical clowns	Reduction of preoperative psychological stress and anxiety in children, reduction of parents' anxiety	Systematic review and meta-analysis	Limitations of the study: the homogeneity and small size of the sample.	Zhang et al., 2017
Hospitalised children	Visual Arts- Drawing	Active	Drawing pain stories	Assisted with self-explanation of pain. Drawings can elicit information about children's views and experiences; decreased cognitive performance in hospitalised children; more emotional disturbance in the control group than in the hospitalised children's group	Qualitative study		Kortessluoma et al., 2008
Hospitalised children	Multiple	Active	Creative play intervention: building toys from medical equipment	Positive impact on children and family members' satisfaction, children gaining an active role within the hospital environment, reduce their fear, enabling satisfying experiences	Mixed-method study	Limitation of the study: the sampling strategy	Teksoz et al., 2017
Children undergoing blood tests	Music	Receptive	Live music listening	Pain and distress reduction	Randomised prospective controlled trial	Well accepted by children and parents	Caprilli et al., 2007
Paediatric cancer patients and their parents	Multiple	Active	Creative arts therapy and Music therapy	Improved quality of life	Mixed-methods pilot study		Madden et al., 2010
Cancer patients	Dance	Active	Ballroom dancing	Improved functional exercise capacity; long-term participation associated with a high self-efficacy and active lifestyle	Interventional study pre-post evaluations	No significant effects on fatigue or body image	Thieser et al., 2021
Oncologic patients undergoing chemotherapy	Visual Arts	Active	Painting	Improved quality of life, reduced depression levels	Case-control study	Effects were stronger for patients with no previous experience of painting art therapy	Bozcuk et al., 2017
Advanced cancer patients	Multiple	Active	Painting, pottery, gardening and woodwork	Learning new methods to cope with limited physical abilities and existential problems in palliative case	Qualitative study		la Cour et al., 2007

Target group	Art discipline	Participation	Intervention	Specific outcome	Type of study	Comments, limits, negative outcomes	Reference
Minority people diagnosed with cancer	Theatre	Active	Readers' Theatre	Nurtured healing, renewal, affirmation and shifts in knowledge, attitudes and beliefs, which empowered action	Qualitative study	A respectful environment for adult learners from diverse ethnic and cultural backgrounds to engage in meaningful conversations	Cueva, 2010
Cancer patients	Multiple	Active	Creative art courses	Positive changes in coping with emotions, increased level of creativity, more conscious living, an improved overall quality of life and meaning of life	Interventional study, pre-post design	Mood was not changed	Visser & Op 't Hoog, 2008
Women with systemic lupus erythematosus	Visual Arts- Drawing	Active	Drawing the disease and comment their work	Enhanced openness and sharing of personal experience; assisted medical staff understanding of patient's condition, preventing schematization	Qualitative study	Drawing could be used as an unconventional research method as well as a therapeutic approach	Nowicka-Sauer, 2007
Women with chronic fatigue syndrome/ myalgic encephalopathy (CFS/ME)	Multiple	Active	Art-making (embroidery, card-making, pottery, tapestry, painting)	Subjective well-being - increased satisfaction in daily life, positive self-image, hope and contact with the external world	Qualitative study	Creative art-making as part of a more general process of acceptance and adjustment to CFS/ME	Reynolds et al., 2008
Chronic stroke patients	Visual Arts	Active	Drawing, painting, collage, and handcrafts	Increase in general well-being, bodily engagement, brain stimulation and rejuvenation experience; enjoyment, self-appreciation, self-expression and social connection with others	Qualitative study		Sit et al., 2017
Persons with aphasia (Stroke survivors)	Storytelling	Active	Co-construction of stories with medical nurse	Enhanced psychological well-being	Single case study		Bronken et al., 2012
People with aphasia	Photography and Film	Active	Adapted photovoice method for co-designing tools and services for people living with stroke	Useful tool of communication and self-expression for people with aphasia, making the needs of patients more clear to doctors, therapists and designers of tools for people with aphasia. Participation in co-designing items and services found motivating and empowering by participants with aphasia.	Qualitative study	Using a camera might include obstacles for people with aphasia, as their mobility, vision and ability to understand symbols on the camera may be affected by the stroke.	Levin et al., 2007

Target group	Art discipline	Participation	Intervention	Specific outcome	Type of study	Comments, limits, negative outcomes	Reference
Long-term inpatients adolescents with chronic pain	Theatre	Active	Drama and movement therapy	The programme was enjoyed and reported as beneficial in reshaping the patients' own narratives about disability	Observational study		Christie et al., 2006
<b>Caregiving and bereavement</b>							
Cancer caregivers	Music	Active	Singing-Choir groups	Over time participants in the choir group showed a significantly decrease in anxiety than the control group and a significantly increase in well-being, yet no improvements were found for depression	Multisite non-randomised longitudinal controlled study	The choir group could be used to support the mental health and well-being of cancer caregivers	Fancourt et al., 2019
People with dementia	Music	Active	Music therapeutic caregiving	People with dementia seemed to experience care situations as less uncomfortable and joyful as evidenced by a decreased resistant behaviour and an increased positive emotion.	Intervention study	Music therapeutic caregiving might be an effective nursing intervention for people with dementia	Hammar et al., 2011
People with dementia and their carers/nursing staff and family members	Music	Receptive	Live music concerts within care facilities	Experiencing live music concerts brings benefits to all those involved with the care of the people living with dementia, increasing their cooperation, interaction and conversation and decreasing their level of agitation	Qualitative study	Caretakers' well-being achieved as people with dementia became more cooperative as result of the art intervention	Shibazaki & Marshall, 2017
Adult cancer patients	Storytelling	Active	Legacy digital video creation, part of Dignity Therapy	Means for inner procession of diagnosis and experience, and support for caregivers	Pilot, intervention study	Minimal study burden was reported, participants would recommend and use such programme in the future	DeSanto-Madeya et al., 2021
Bereaved parents	Storytelling	Active	Storytelling	Support mourning processes, assist in sense making and reaching a cathartic release	Review		Bosticco & Thompson, 2005
Bereaved Parents	Visual Arts	Active	Painting and calligraphy	Reducing some important prolonged grief symptoms and improving quality of life	Intervention pilot study		Xiu et al., 2020

## 3. Culture and Community Well-being

There are 131 studies included under this thematic heading. In mapping the various aspects of community well-being that can be influenced by culture, we take into consideration the micro, meso and macro levels (Serpa & Ferreira, 2019), that is the level of the individual's relations (micro), of the organisations and communities (meso) and that of governance and policies (macro). Thus, we look at how cultural participation or specific interventions may have an effect on individuals' social behaviour and identity, on the quality of life of specific groups, organisations and the learning and working environments. We also look at how arts and culture can play a role in local development by fostering collaborations across sectors, place identity and citizen engagement in public policy. The macro level is also concerned with the environment in which community life takes place.

Considering the main themes emerging, the analysis is grouped under the categories of (a) social inclusion, (b) school and work-related well-being, (c) local development and (d) built environment.

Interventions in the first category of social inclusion mainly target vulnerable groups, people at risk of exclusion and people for whom health impairments make it difficult to access conventional cultural and arts settings, care centres for elderly adults and schools – especially in the case of children with special needs. Community centres and public venues play a key role in enhancing both social and economic accessibility to these activities.

A series of well-being outcomes are related to the school environment or have the potential to support educational development and social inclusion within the school context. Creative and social skills are increasingly required by the current labour market, while work-relations and organisational structures depend highly on individual well-being and the collective capacity to adapt to fast-changing realities.

We are looking to understand how built environments and public-space design impact individual and community well-being and what culture-related processes prove effective in citizen engagement and urban development.

It is however important to note that most studies in our review are small scale interventions or activities that take place in group settings, in community centres, schools and healthcare spaces, and report on social outcomes at individual level. Very few of them analyse community interactions or effects of interventions at the level of groups, organisations or settlements. Moreover, the fact that many of the art-based interventions aiming to increase social inclusion are small scale initiatives led in by community organisations and initiative groups may also be an indicator that public policies in this area are failing to provide adequate responses to the varied needs of vulnerable groups.

### 3.1 Summary of evidence

#### A. Social Inclusion

##### Social bonding and inclusion

There is a large evidence base showing that active cultural participation such as singing and playing music (Hagemann, 2021; Moss et al., 2018; Moss & O'Donoghue, 2020; Petrovsky et al., 2020), reading (Billington, 2019), storytelling (Xie et al., 2021) and dancing (Baltà Portolés, 2021) can increase social inclusion and/or bonding.

Further evidence suggests that other forms of art engagement such as writing (Hilse et al., 2007), visual arts (Rose & Lonsdale, 2016; Sit et al., 2017; Saavedra et al., 2018), storymaking (Fletcher & Mullett, 2016) and creative activities (Pearce & Lillyman, 2015; Slattery et al., 2020) can also support social inclusion and bonding.

##### Inclusion of disadvantaged groups

Use of accessible technology like mobile phones as a platform for engagement in creative activities may be an attractive learning tool for children and adolescents from educationally disadvantaged communities (Duarte-García & Sigal-Sefchovich, 2019).

Photography and filmmaking can be used by deaf children and adolescents as means for enhancing resilience through self-expression and communication, overcoming sign-language barriers, enabling, at the same time, reflexivity over life experiences and self-appreciation (Young et al., 2019).

Participation in a camp including creative writing activities facilitated a sense of empowerment and hope for the personal and educational development of disadvantaged youth (Mazza, 2012).



People with developmental disabilities may benefit from creative therapies in a dedicated Creative Arts Therapies Center (Lister et al., 2009).

Adolescents in a court-referred residential treatment engaged in music improvisation benefited from improvements in performance of their school and work roles, their behaviour toward others and a reduction in negative emotions, anger and interpersonal problems (Bittman et al., 2009). Disadvantaged people, including prisoners, engaged in community arts activities enjoyed better mental health and well-being (Kelaher et al., 2014).

Social inclusion was facilitated by active participation in art activities taking place in cultural venues such as theatres and museums. Participation in theatre activities might foster the integration of children with disabilities provided that adequate infrastructure and conditions are available (Goodley & Runswick-Cole, 2011). Young people with social, emotional, and behavioural difficulties taking part in an art intervention were able to recontextualise and resignify their social relations (Thompson & Tawell, 2017). Museums and art galleries have been considered to have an important social role in the health and well-being of communities (Camic & Chatterjee, 2013). Health workers' participation in a community theatre experience helped with preventing discrimination and fostering community empowerment for elderly LGBT people in care centres (Hughes et al., 2016).

Theatre and art workshops have been used with promising results in social work for the recovery of fragmented identities and improving self-confidence and self-worth among the homeless (Cordero Ramos & Muñoz Bellerin, 2019; Silva et al., 2018). Theatre activities also created a respectful environment for adult learners from diverse ethnic and cultural backgrounds to engage in meaningful conversations (Cueva, 2010).

Cultural participation also seemed to increase knowledge and awareness of various health conditions among underserved communities and provided support networks for disadvantaged individuals suffering from illness (Leckey, 2011; Leenders et al., 2011; Chung et al., 2009; Yuen et al., 2011; Cueva, 2010).

A community-based woodwork group was found to support men with disabilities in community rehabilitation to achieve their rehabilitation goals and improve socialisation (Fulton et al., 2016).

## Increasing social engagement and reducing isolation

In the case of both receptive forms of cultural participation, such as theatre-going, and active ones, such as being involved in drama, singing and visual arts activities, positive effects towards increased social engagement of older people have been reported (Meeks et al., 2020; Cantu & Fleuriot, 2018; Pearce & Lillyman, 2015; Petrovsky et al., 2020; Brustio et al., 2018; Dadswell et al., 2020).

Participation in an art festival enhanced social collaboration by motivating collective actions such as networking or exchange of knowledge with others, and highlighted increases and decreases in social inequalities by factors related to cultural participation, competence and knowledge, financial support or resources for participation, competitiveness and power relations (Warran, 2019).

Being actively engaged in visual arts activities was found helpful in reducing isolation and feelings of loneliness among certain elderly people living in disadvantaged urban communities (Murray & Crummett, 2010). In order to enable such outcomes, particular attention needs to be given to increase access of socially isolated individuals to arts and community activities (Davidson et al., 2014) and to have in mind that certain activities may be perceived with reluctance due to negative social or cultural associations (Murray & Crummett, 2010).

Participation in photography activities can enable young people to overcome social isolation, marginalisation and stigma (Charles & Felton, 2020), and dance movement helped young participants in acquiring life skills useful in preventing risky behaviour (Rodgers & Furcron, 2016).

Engagement with arts may also reduce isolation in people suffering from illness, such as people with quadriplegia in singing activities (Tamplin et al., 2013a), and people with mood disorders in dancing activities (Tavormina & Tavormina, 2017).

## Reducing stigma

Engaging in creative activities such as photography can help prevent social stigma about mental health conditions among youth (Charles & Felton, 2020).

Group art practices and participatory methodologies were found promising in creating an ability to challenge stigmatising discourses around poverty and people facing food poverty (Wheeler, 2018).

Specific studies report on how attending theatre performances with relevant content helped reducing public stigma

surrounding dementia and Alzheimer's disease (Burns et al., 2018), and how a dance project helped to fight the societal stigma that reinforces biases towards people with mental illness (Tavormina & Tavormina, 2017).

## Well-being and inclusion of refugees

Engagement in community arts was found to facilitate increased quality of life, enjoyment of life, as well as a sense of community belonging, for refugees and asylum seekers (Philipp et al., 2015).

A community language radio was found to enhance the well-being of presenters from immigrant communities, meeting their needs of autonomy, relatedness and competence. At the same time, ethnic community radio might foster migrant well-being, offering an accessible and adaptable outlet for creative expression and an entry point for various services (Krause et al., 2020).

Through storytelling activities, young refugees benefited from liberation from disempowering identities, and the re-defining of relationships (Clayton & Hughes, 2015).

## B. School and Work-Related Well-being

### School related well-being

School-based drama and theatre plays were found to positively influence on the short term knowledge and attitudes related to the health behaviour of children and adolescents (Joronen et al., 2008). Art based approaches in health promotion were reported supportive for the growth of young leaders as mental health advocates (Kennedy et al., 2020). Creative arts therapy in public schools can help in the development of effective school programmes (Nelson, 2010) and can foster collaboration between community stakeholders (Fritz et al., 2013). A study concluded that school based peer education that integrates drama arts is a promising way for promoting wellness and reducing exposure to violence among urban youth (Chung et al., 2017).

Co-creation activities can enhance school-aged children's reflections on emotions and thoughts about themselves and others (Moula, 2021; Sclater & Lally, 2013), which can facilitate interpersonal and communication skills, self-cognitive reconstruction and social role ability (Chang et al., 2019). Improved collaboration and communication skills were reported from children's engagement with community dancing (Eleni & Georgios, 2020) and creative drama (Gao et al., 2021). Art therapy in public schools might empower students with special needs (Ilsis et al., 2010).

Reading a short fiction text may facilitate development of empathy in university students (Djicic et al., 2013). Watching theatre and drama was also found to increase empathy in medical students (Baker et al., 2019; Suh et al., 2021).

Active engagement in art therapies and creative activities can support management of emotions, group interactions and confidence in the case of primary-school children (Moula, 2021) and early age dual language learners (Gao et al., 2021). Music listening helped to reduce stress and anxiety in college/university students (Fiore, 2018). Watching youth TV drama series (K-drama) helped students with past anxiety and depression to improve their knowledge, attitudes and behaviours in coping with bullying (Ta Park et al., 2020).

An experimental study showed that sketching during the creative process increased the flow experience and enabled students to perceive a creative mental synthesis task as being less difficult (Cseh et al., 2016). A study found that daily reading for pleasure in childhood was associated with better behavioural adjustment in early adolescence (Mak & Fancourt, 2020). Participation in dance movement activities can improve the competence of youth in important life skills (Rodgers & Furcron, 2016). Improved decision-making and self-expression was also observed in college students participating in drama-based therapy (Chang et al., 2019). Creative writing activities contributed to a sense of empowerment in students from disadvantaged groups (Mazza, 2012).

Use of accessible technology like mobile phones as a platform for engagement in creative activities could be an attractive learning tool for children and adolescents from educationally disadvantaged communities (Duarte-García & Sigal-Sefchovich, 2019).

A randomised controlled trial using theatre expression workshops found no significant associations between participation in the theatre intervention and a greater reduction of impairment in youth placed in special classes due to learning, emotional and behavioural difficulties, than in the case of the control groups. The study suggests that these educational settings present particular challenges and may require interventions which specifically address some organisational dimensions (Rousseau et al., 2014).

## Work related well-being

Several studies have reflected on the relationship between engagement with the arts and well-being in the workplace or a work context. Among them, the most frequent area of focus was interventions concerning health workers and caretakers.

A scoping review found that arts activities including arts on prescription programmes, choral singing and shared reading groups have meaningful effects on mental health and the well-being of working adults (Jensen et al., 2020).

A literature review concluded that there are promising results related to the inclusion of cultural activities in the working environment of health workers, yet the heterogeneity of the studies did not provide a robust base to confirm more specific outcomes (Jensen & Bonde, 2018). Health service workers singing in a work-place choir perceived an improvement in their mental health, a reduction of depression and enhanced social connectedness, personnel engagement, and enjoyment, however, such an activity may be appealing only to certain staff members (Moss & O'Donoghue, 2020). The creation of a creative arts journal encouraged self-expression and strengthened professional relationships among medical staff and students (Rodríguez et al., 2012).

Engaging with creative activities also enabled personal growth and the development of collaborative skills in medical students (Jones et al., 2017; Nagji et al., 2013). Activities such as watching theatre and recorded drama or writing can enable increased empathy with, and understanding of, patients' conditions among health professionals and students (Hughes et al., 2016; Baker et al., 2019; Suh et al., 2021; Milligan & Woodley, 2009). Ethical perspectives have been informed by participation in drama activities (Zbikowski et al., 2020) and creative writing tasks (Milligan & Woodley, 2009).

In certain cases, healthcare workers and caretakers experienced reduced stress, increased job satisfaction, and felt more caring (Shibazaki & Marshall, 2017; Osman et al., 2016; Shuber & Kok, 2020; Anderson & Gustavson, 2016) and better able to deal with their burdens (Leonard & Libera, 2020). Direct and indirect well-being benefits were registered in caretakers for patients with dementia as a result of music and singing interventions (Shibazaki & Marshall, 2017; Osman et al., 2016). To a large extent, this was due to the fact that, during and after interventions, people with dementia were more cooperative and easier to care for (Hammar et al., 2011).

An interactional music-making intervention supported community health workers in developing skills for building relationships, to mobilise members of the community to take responsibility for their own health and to access services, and for conducting health-promotion activities (dos Santos & Lotter, 2017).

Professional contemporary dancers seemed to experience dance as a creative collaboration process that opened up new dimensions of understanding and experience in relation to well-being and care for themselves and others (Purser, 2019). Zajenkowski et al. (2015) also demonstrated that recreational dance and dance training could instigate positive mood change, though the authors cautioned that, when dancers are in a competitive environment, this can induce feelings of stress which can decrease enjoyment.

Urban working adults creating an artwork with nature-sourced materials in an indoor setting perceived a relief of work-related stress and were inspired to reflect on life besides work, as a symbolic reconnection with nature (Chang & Netzer, 2019). Individuals listening to 'happy music' reported higher creativity while performing a divergent creativity task when compared with participants who completed the task in silence (Ritter & Ferguson, 2017).

The participation of adults with burnout symptoms in a series of creative workshops found that, after seven weeks of intervention, participants tended to experience a lower level of burnout (when measured from high to medium or low), a higher level of well-being, more positive experiences – and also more positive experiences than negative ones (Cacovean et al., 2021).

Arts and crafts were proven to be successful when used as occupational therapy in rehabilitation (Fulton et al., 2016) and leisure occupation for people who are not active on the labour market due to old age (Edwards & Owen-Booth, 2021) or illness (Reynolds et al., 2008; Fenech, 2009).

## C. Local Development

### Well-being, and quality of life

Several studies have shown that cultural participation (Fraser et al., 2015), and in particular engagement with singing (Hagemann, 2021; Daykin et al., 2018), reading (Billington, 2019) and dance (Baltà Portolés, 2021), helped increase the well-being and quality of life of individuals of all ages.

The general and psychological well-being of people suffering from illness (Gross et al., 2015; Saavedra et al., 2018; Crone et al., 2018; Sit et al., 2017; Crone et al., 2013; Bronken et al., 2012) can be improved by different forms of engagement with the arts. Health-related quality of life was also among the most cited outcomes for patients with various health conditions (Reagon et al., 2016; Qin, 2020; Liu et al., 2019; Zeisel et al., 2018; Madden et al., 2010; Bozcuk et al., 2017; Visser & Op 't Hoog, 2008).

Engagement in community arts can facilitate an increased quality and enjoyment of life for refugees and asylum seekers (Philipp et al., 2015).

A cross-sectional survey, including a large sample of individuals living in non-isolated areas, showed a positive relationship between various cultural activities and individual psychological well-being (Grossi et al., 2011). Researchers found that cultural access ranked immediately after health status (that is, absence or presence of disease) as the second most important psychological well-being determinant (Grossi et al., 2012).

A scoping review on the contribution of heritage and heritage related interventions on well-being, found a range of physical, mental, and social benefits for individuals and positive effects at community level through improved social relations, empowerment and sense of pride and belonging (Pennington et al., 2019).

### Active citizenship

Participatory arts projects enabled community well-being, fostered leadership skills and encouraged people to take up new roles and responsibilities in their communities (Cameron et al., 2013).

A systematic review found that arts-in-nature activities offered an inclusive medium to increase nature connectivity and environmental awareness, and to potentially decrease eco-anxiety in children and youth (Moula et al., 2022).

In addition to the potential of theatre as an effective public health-promotion platform, one study also suggested that theatre can inform policy interventions and elicit public opinion on policy issues (Nisker et al., 2006).

### City cultural profile and well-being

A comparative study of two cities aimed to assess the impact of cultural participation on subjective well-being, while comparing the opportunities for cultural participation as enabled by the city structure (that is., cultural events and cultural facilities). The researchers found that cultural participation, among other factors such as social cohesion and bonding, positively influenced subjective well-being in cities with a well-developed socio-economic status (Blessi et al., 2016).

A qualitative study provided the perspectives of cultural institutions participating in different Arts on Prescription programmes. The findings suggested that such programmes enhanced interdisciplinary collaboration with healthcare providers (along with interest in potential collaborations), and enhanced and strengthened professional skills and service provision (Jensen & Bonde, 2020).

Living in historical places and close to heritage sites can contribute to the well-being of local communities, enabling a sense of pride, creating a sense of place and identity and contributing to the development of social capital and the economy. Negative effects associated with tourism and heritage-led regeneration projects have been observed (Pennington et al., 2019).

## D. Built Environment and Well-Being

### Built heritage

A scoping review on the contribution of heritage and heritage related interventions on well-being, found a range of physical, mental, and social benefits for individuals and positive effects at community level through improved social relations, empowerment and sense of pride and belonging (Pennington et al., 2019).

### Environmental design in healthcare

Art and environmental design in mental healthcare units can improve perceptions of the healthcare environment, and the well-being of patients and staff. Environmental conditions such as noise levels, quality of lighting, safety, and exposure to natural settings may have an effect in this regard (Daykin et al., 2008a).

A scoping review identified that social and cultural interactions and values are key components of quality design in healthcare environments, along with environmental values and the resilience of building construction. It also highlighted the need for person-centred, welcoming, accessible spaces that support the privacy and security of patients and staff (Anåker et al., 2017).

### Public space design

Our screening of the literature found very few relevant studies on the effects of art and design in public spaces on the well-being of individuals and communities. There were a number of articles that discussed broad principles for urban design to support well-being, yet only a few focused on the presence of art and art-mediated outcomes, and even fewer measured their effects. Thus, the research findings presented mainly identified criteria for quality public space design and its potential benefits.

Given the evidence that viewing visual artworks can contribute to a reduction in stress and systolic blood pressure (Law et al., 2021), using artworks in community environments like schools, healthcare buildings and workplaces could prove promising.

A book on urban design and mental health identified that green, active, pro-social and safe spaces promoted community and individual health and well-being. It emphasised the need for aesthetic factors that enhance relaxation and the sense of security. It called for wider access to green space and opportunities for physical activities and social gathering, with facilities appropriate for different age groups (McCay et al., 2017). These four main concepts (of designing green, active, pro-social and safe places) were also highlighted by a policy brief aiming to promote sustainable improvement in the general population's mental health (Centre for Urban Design and Mental Health, 2016).

Another study found that people tended to favour spending more time in open, public spaces and to be in areas which were visually inspiring and enhanced a sense of relaxation. It called for public spaces to be designed based on an aesthetic understanding of citizen preferences, with soothing colours and a proximity to green areas. Such spaces may enhance social participation and positive emotions (Alyari, 2018).

Mental health in urban areas is a pressing social challenge, and is set to grow as the stressors of city living continue. A pilot architectural intervention using inclusive design methods showed promising results in creating vibrancy and reducing suicide-related negative connotations around an urban riverfront. The authors proposed design as a mediator in tackling social challenges, bringing together expertise from health, social work, architecture and governance; they also provide holistic solutions. Involvement of communities throughout the design, prototyping and implementation phases supported the adoption of urban solutions, once finalised (Spencer et al., 2019).

Another study on square dancing provided a novel example of how urban furniture design could support the two different health and well-being outcomes of supporting physical and social activity in the elderly, as well as fostering inter-generational interaction. (Zhu et al., 2021).

## Different ways of engaging with arts and culture activities

In this thematic section, 103 (79 per cent) of the 131 articles included in the review referred to active forms of cultural participation, 17 (13 per cent) to receptive cultural participation and 11 (8 per cent) to both active and receptive engagement.

- Studies that reported health benefits from singing in group contexts mentioned outcomes such as the building of social support, enablement of collaboration, a sense of identity and belonging, support to reduce social isolation, improvements in mood and social functioning;
- Most studies that focused on receptive participation in theatre highlighted the receptive use of art as a vehicle for mental health promotion and as an important aid in destigmatising certain health conditions;
- Receptive participation in theatre productions was especially suited for prevention-focused messages or as a tool to engage audiences that were part of marginalised groups, and therefore did not benefit from equal access to health information;
- Arts organised as social events helped to reduce isolation, especially in the case of elderly people or people living with illness;
- Dance therapies were being increasingly used to link individual perceptions of embodiment to sociality and community identities;
- Publicly available infrastructure has an important role in facilitating community arts and well-being, with museums, heritage sites and art galleries being identified as having an important social role for health promotion, well-being and social inclusion;
- The studies that focused on video as a vehicle for promoting well-being highlighted the potential that came from the accessibility of that medium. Film and video recordings could enhance prevention and educational programmes because they are technologically accessible to a very wide audience;
- Participation in arts festivals and community events can generate well-being at a community level;
- The quality of design of built environments was found to influence people's experiences in healthcare, and their well-being and social connections. Urban design was proposed as a mediator in tackling urban social issues.

## 3.2 Included studies

Target group	Art discipline	Participation	Intervention	Specific outcome	Type of study	Comments, limits and negative outcomes	Reference
Individuals and communities							
Young people	Dance	Active	Youth dancing programme - dance movement	Staying in an inner city youth dancing programme for a longer period (1-3 years) was useful in preventing risky behaviours and helped young people acquire competence in essential life skills.	Quasi-experimental study	Compelling proof of dance movement's efficacy as a viable youth development tool.	Rodgers & Furcron, 2016
Young people	Photography	Active	Photography	Overcoming social isolation, marginalisation, and stigma	Qualitative study		Charles & Felton, 2020
Adolescent	Storytelling	Active	Transmedia games	Improved artistic, technological and communication skills	Review article		Gilliam et al., 2012
Children/ Adolescents	Literature	Active	Daily reading for pleasure	Reading most days for pleasure in childhood (age 11) associated with better health-related behaviours in early adolescence (age 14) - lower odds of early onset of cigarette and alcohol use and a better fruit consumption	Longitudinal cohort study	Daily reading is associated with lower levels of physical activity.	Mak & Fancourt, 2020
Minority youth and elders	Multiple	Active	Digital story making	Supported critical thinking, opportunities to think deeply about a topic or theme; youth and elders connecting in discussions about healthy living, enhanced relationships between elderly and youth	Qualitative study	Constantly adapting to the needs of youth in the processes reported as difficult.	Fletcher & Mullett, 2016
Multiple	Literature	Active	Reading groups	Improved mood and mental states, social bonding and inclusion, self-expression, finding of meaning and	Literature review		Billington, 2019
Multiple	Dance	Active	Dance classes, movement therapy	Improved quality of life, improved social inclusion and bonding	Review		Baltà Portolés, 2021
General population	Music	Active	Choir and singing groups	Improved psychological well-being, improved social inclusion and bonding	Systematic review		Hagemann, 2021



Target group	Art discipline	Participation	Intervention	Specific outcome	Type of study	Comments, limits and negative outcomes	Reference
General population	Storytelling	Receptive	Sharing emotional stories (happy and sad)	Better recall quality and a higher level of interpersonal closeness in the group sharing happy stories	Experimental study		Xie et al., 2021
General population	Cultural participation	Active	Fringe art festival	The festival environment enabled networking and forms of social collaboration, but some already established groups remained exclusionary. The festival stimulates collective action, where performers collaborate and share knowledge, but integration into the community is exclusive, requiring specific competences. The Fringe Society aims to overcome this and advocates for diversity and inclusivity.	Qualitative study		Warran, 2019
Local communities	Multiple	Active	Participatory arts projects	Improvements in health and well-being as an outcome of qualitative creative work, equipping people to develop leadership skills and to take responsibilities in their communities	Qualitative study		Cameron et al., 2013
Adults	Music	Receptive and active	Music and singing	Music and singing - improved well-being and reduced depression in adults, along with reduced isolation in older adults; group singing – enhanced well-being and quality of life for adults with chronic conditions	Systematic review		Daykin et al., 2018
Adults	Music	Active	Choir practice	In terms of physical, social, and emotional rewards, women performed much better than men. Professional singers reported noticeably more positive effects on their bodies, communities, and spirits than amateur singers Social interaction, social connection, bonding and social inclusion, promoting diversity	Cross-sectional mixed-methods study		Moss et al., 2018
Adults	Music	Active	Singing	Increased quality of life, resilience, social support, and social connectedness	Quasi-experimental	No direct decrease of psychological stress	Sun & Buys, 2016

Target group	Art discipline	Participation	Intervention	Specific outcome	Type of study	Comments, limits and negative outcomes	Reference
Adults	Literature	Active	Fiction reading	Enhanced empathy skills, positively correlated with social support	Cross-sectional study		Mar et al., 2009
Adults	Literature	Active	Fiction reading	Enhanced empathy	Experimental study	Effects are enhanced when readers became 'emotionally transported' with the story	Bal & Veltkamp, 2013
Adult women	Music	Active	Choir singing	Choral singing can influence women's perceptions of their well-being in four different ways: (1) through the enjoyment of singing; (2) believing singing to be necessary for survival; (3) using group singing as a means of social connection, which enhanced a sense of belonging and identity, increasing self-confidence and self-esteem; and (4) by encouraging social inclusion.	Qualitative study		Batt-Rawden & Andersen, 2020
Older people	Music	Active	Community group singing compared with usual activities	Significant positive effects of singing on mental health related quality of life compared with usual activities, no differences on physical aspects of quality of life, anxiety or depression six months after randomisation; significant positive differences in measures for mental health related quality of life, anxiety and depression at three months post randomisation.	Randomised controlled trial	Compared to usual activities, group singing proved marginally more cost-effective.	Coulton et al., 2015
Elderly	Multiple	Receptive and active	Music (singing or instrumental), flora therapy, cloth mural creation; painting or drawing, dance; theatre or drama; writing or narrative (prose, poetry, storytelling); and photography or film	Quality of life	Scoping review	There was thought to be a need to initiate programmes of research instead of singular study teams	Fraser et al., 2015

Target group	Art discipline	Participation	Intervention	Specific outcome	Type of study	Comments, limits and negative outcomes	Reference
Elderly adults	Theatre	Receptive	Attending theatre performances	Through the psychosocial advantages of flow, social engagement, and belonging, theatre involvement was indirectly associated with satisfaction and enjoyment of the theatre, hedonic well-being, and social functioning.	Mixed-methods study		Meeks et al., 2020
Elderly adults	Dance	Active	Dance classes	Positive effects on mobility performance, improvement of quality of life and social engagement	Pre-test–post-test study	Dance as a feasible form of physical training (not expensive, suitable and adaptable for elderly adults)	Brustio et al., 2018
Healthy elderly people	Multiple	Active	Participatory arts	Sense of achievement, flow social and emotional support, sense of purpose, opportunities for social interaction	Qualitative study	Creative ageing	Bradfield, 2021
Elderly	Music	Active	Community-based singing groups	Improved memory and recall, enjoyment, increased social interaction, improvements in physical health, better well-being and mental health, cognitive stimulation and learning	Qualitative study	Long-term commitment may have led to improved mental health and well-being	Skingley & Bungay, 2010
Healthy elderly adults	Music	Active	Playing a musical instrument	Musical instrument playing may assist in preserving cognitive function in community-dwelling older adults	Post-hoc observational analysis	Results need to be confirmed in a clinical trial	Mansky et al., 2020
Healthy older adults	Music	Active	Choir practice	Choir singers reported a better performance had better verbal and cognitive flexibility, and high activity choir singers experienced better social integration compared to members of the control group	Cross-sectional study		Pentikäinen et al., 2021
Older adults	Multiple	Active	Art classes, including drawing, painting, creative writing and mixed media	Well-being and influence over the health of the brain by stimulating a stronger ability to focus	Pre-post survey study		Cantu & Fleuriet, 2018

Target group	Art discipline	Participation	Intervention	Specific outcome	Type of study	Comments, limits and negative outcomes	Reference
Older adults day	Theatre	Active	Playback theatre groups	The research presents three categories, each of which corresponds to one of three possible transformative paths that encouraged social and creative participation. It was discovered that the procedure had the ability to make two contributions that are seen to be pillars for maintaining older individuals' positive identity: preserving continuity and encouraging personal development	Qualitative study		Keisari et al., 2020
Elderly	Music	Active	Singing programs conducted by musician	Little effect on well-being and health	Mixed-methods study	The study also shows that we need to create better methods for recruiting socially isolated people to participate in this socio-musical engagement opportunity.	Davidson et al., 2014
Older adults in residential care home	Multiple	Active	Reminiscence arts, seated dance, and orchestral music	Social connectedness and bonding with caregivers, increased interaction and communication, improved sense of quality of care	Qualitative study		Dadswell et al., 2020
Old and older age people	Visual Arts	Active	Participatory painting programme	Improved levels of confidence, self-value, feelings of safety, calm and tranquillity, reconnection of the present with the past. A means to enhance connectedness and sharing	Qualitative study		Rose & Lonsdale, 2016
Older people from rural communities	Multiple	Active	Creative arts projects: dance, film, painting, drawing, crafts	Increased self-esteem and levels of self-worth, development of new skills, making new social connections (especially collaborating with a different generation)	Cross-sectional study		Pearce & Lillyman, 2015
Rural communities	Multiple	Active	Photography and song writing as community-enabled art-forms	Community arts are linked to the empowerment of individuals and communities through participatory and inclusive practices	Qualitative study		Sonn et al., 2015

Target group	Art discipline	Participation	Intervention	Specific outcome	Type of study	Comments, limits and negative outcomes	Reference
Indigenous community	Storytelling	Active	Digital stories about HIV prevention activism	The youngsters and their communities benefited from the sharing of their digital stories.	Qualitative study		Flicker et al., 2020
Refugees and immigrants							
Immigrants	Multiple	Active	Community language radio	Enhancing the well-being of presenters; meeting the needs of autonomy, relatedness and competence; fosters migrant well-being, offering accessible and adaptable outlets for creative expression	Mixed-methods study		Krause et al., 2020
Underage refugees	Multiple	Active	Storytelling: Video, writing (poems, small text, essays)	Liberation from disempowering identities and the redefining of relationships	Dialogical approach		Clayton & Hughes, 2015
New refugees, immigrants and asylum seekers	Multiple	Receptive and active	Community arts installation event	Raised awareness on the role of arts in community, support sense of community belonging, enjoyment of life	Qualitative study		Philipp et al., 2015
Multicultural youth	Theatre	Active	Sharing Stories drama workshop	Improved sexual health knowledge, increased confidence levels, positive attitudes towards sexual health	Mixed-methods study	Peer-sharing proves good results	Roberts et al., 2017
Immigrant and refugee youth in special classes	Theatre	Active	Theatre expression workshops	Theatre activities were not associated with greater reduction in self-reported impairment and symptoms in youth with learning, emotional and behavioural difficulties, compared to control groups. Small improvements in first generation immigrant students, and an increase in impairment in second generation youth.	Randomised Controlled trial	The setting of special education classes poses challenges that may need a special approach.	Rousseau et al., 2014
Disadvantaged individuals and communities							
Children and adolescents from educationally disadvantaged community	Music	Active	Electroacoustic composition and performance	The innovative use of technology (mobile phones) in attracting children and adolescents to electroacoustic composition and performance	Project description	The successful use of mobile phones as tool for learning	Duarte-García & Sigal-Sefchovich, 2019

Target group	Art discipline	Participation	Intervention	Specific outcome	Type of study	Comments, limits and negative outcomes	Reference
Deaf children and adolescents	Photography and Film	Active	Photography and filmmaking	Enhanced resilience - reflexivity over life experiences, reappraisal of self-abilities, new means for self-expression and communication while overcoming ordinary sign-language barriers	Qualitative study		Young et al., 2019
Disadvantaged middle-school-age youth	Multiple	Active	Art and athletics summer camp: Creative writing, athletic trainings, arts and leadership skills	Sense of empowerment, hope for personal and educational development	Qualitative study		Mazza, 2012
Children with disabilities and their carers	Theatre	Active	Participation in artforms that are usually inaccessible for children with disabilities and their carers	Theatre productions foster the integration of children with disabilities	Observational study	The authors call for more infrastructure that supports this type of intervention.	Goodley & Runswick-Cole, 2011
Young people with social, emotional, and behavioural difficulties	Multiple	Active	Art intervention	A respite from situations of conflict at school through changes of physical and emotional space can aid the development of better coping mechanisms, and increase self-esteem, self-confidence and resilience	Qualitative study	No evidence about long-term effects	Thompson & Tawell, 2017
Adolescents in a court-referred residential treatment	Music	Active	Music improvisation	Improvements in school and work role performance, behaviour toward others, anhedonia, Negative Affect, anger and interpersonal problems	Randomised controlled trial		Bittman et al., 2009
People with developmental disabilities	Multiple	Active	Creative Arts Therapies Center: drama, music, painting, dancing, movement as therapy	Creative Arts Therapies Centres can challenge the preconceived ideas of the audience developmental disabilities and can improve social integration, quality of life, and self-worth of people with developmental disabilities	Case study	Recommendations for a Creative Arts Therapies Center in terms of committed people, financing, housing, staffing, professional links and community	Lister et al., 2009
Participants from disadvantaged backgrounds (incl. primary school students, youth, women and women prisoners)	Multiple	Active	Community arts (theatre, dancing, circus)	Improved mental health and well-being outcomes, the climate of the arts organisations enabled the outcomes	Mixed-methods study	Differences between the arts organisations and the programmes evaluated.	Kelaher et al., 2014

Target group	Art discipline	Participation	Intervention	Specific outcome	Type of study	Comments, limits and negative outcomes	Reference
Homeless people	Theatre	Active	Theatre based method	Theatre is effectively used in social work for the recovery of fragmented identities among people facing social exclusion, such as the homeless	Qualitative study	Self-confidence and self-worth increased as a result of acquiring new capabilities and feeling useful	Cordero Ramos & Muñoz Bellerin, 2019
Homeless people	Multiple	Active	Art workshops	Self-expression, strengthened social support networks for participants and team, awareness of the social conditions of homeless people	Case report		Silva et al., 2018
Elderly adults with chronic conditions living in low-income housing	Theatre	Active	Community-based theatre activities	Improvement in psychological well-being and health-related quality of life	Mixed-methods study		Yuen et al., 2011
Minority people diagnosed with cancer	Theatre	Active	Readers' Theatre	Nurtured healing, renewal, affirmation and shifts in knowledge, attitudes and beliefs that empowered action	Qualitative study	A respectful environment for adult learners from diverse ethnic and cultural backgrounds to engage in meaningful conversations	Cueva, 2010
Indigenous people who live in remote communities	Visual Arts	Active	Exhibition, community-based Arts in Health initiative	Social inclusion	Case study		Leenders et al., 2011
Underserved communities of colour	Multiple	Active	Photo exhibit, Spoken word and comedy events	The perceived collective efficacy (the community shared belief) for improving depression care may be an important factor in increasing community engagement, contributing to changed perspectives of depression as a community concern	Community-partnered participatory research	Limitation: self-reported data from a convenience sample from a single geographic area	Chung et al., 2009
Elderly residents in a disadvantaged urban community	Visual arts	Active	Participatory arts project	Feelings of loneliness and isolation and of being forgotten by the larger community were relieved through challenging the negative outsider representation of their community	Qualitative study	Older working-class men may not be able to engage so eagerly with certain forms of artmaking	Murray & Crummett, 2010
Elderly adults from low socioeconomic status	Music	Active	Choir singing	Joy, enjoyment, social engagement and connection	Qualitative study	Requirement to consider other group members' talent and musical preferences that may limit one's feeling of comfort	Petrovsky et al., 2020



Target group	Art discipline	Participation	Intervention	Specific outcome	Type of study	Comments, limits and negative outcomes	Reference
Men in community rehabilitation	Crafts	Active	Community-based woodwork group in community rehabilitation	Achieving rehabilitation goals, socialisation for men with disabilities	Mixed methods study	Limitations: lack a comparative control group,	Fulton et al., 2016
People in poverty	Multiple	Active	Arts-based and participatory methods to explore food poverty	Group art practices and participatory methodologies can challenge stigmatising discourses and can contribute to debates surrounding the ability to resist stigma and its relation to well-being	Qualitative study		Wheeler, 2018
People with various health conditions							
People with dementia and the wider community	Theatre	Active	Drama-based interventions at community level	The practice of cultural community development has the potential to improve the lived experience of people living with dementia in care centres	Case study		Basting, 2018
People with dementia and their caregivers	Multiple	Active	Creative activities	Positive effects for people with memory loss and their caregivers, and for their relationships	Qualitative study		Mondro et al., 2020
People with severe mental illness	Multiple	Active	Creative visual arts workshops: painting, drawing, collage, sculpture, printmaking	Improved social inclusion with a significant size effect and psychological well-being with a low size effect	Mixed-methods study (repeated measures design)	Use of museums and other public spaces for such activities encouraged	Saavedra et al., 2018
People with mental health conditions	Music	Active	Community singing workshops	Improvement or maintenance of the mental health and well-being, providing a safe environment for developing social skills and work-related skills	Mixed-methods study		Shakespeare & Whieldon, 2018
Adults dealing with mental health conditions, social isolation and chronic pain	Multiple	Active	Arts on Prescription workshops	Global well-being (improved mood and reduced tension) decrease of tense arousal (less stress, anxiety and nervousness)	Multilevel, repeated-measures design study		Holt, 2020
General public	Theatre	Receptive	Self-revelatory performance on dementia	Reduced public stigma surrounding dementia and Alzheimer's disease	Pre-post study		Burns et al., 2018

Target group	Art discipline	Participation	Intervention	Specific outcome	Type of study	Comments, limits and negative outcomes	Reference
People with dementia and their families	Dance	Active	Dance program	Intrinsic capabilities of people with dementia for creative self-expression through playful and imaginative engagement with others, supporting social inclusion	Qualitative sequential multiphase study		Kontos et al., 2021
Adults with mental health conditions	Museum	Active	Arts-and nature-based museum intervention	Creative green prescriptions, can significantly impact the lives and psychological well-being of adult with mental health conditions Participants experienced an increase of well-being, through improved self-esteem, decreased social isolation and the creation of communities. Results also show there is a significantly high increase in psychological well-being	Exploratory sequential mixed methods	More research into the relationships between creativity, arts, nature, health and well-being outcomes is needed	Thomson et al., 2020
People with mental health conditions	Multiple	Active	Creative arts	Healing and protective effects on mental well-being, improvements within the individual's immediate social networks, reducing stress, stimulating relaxation, stimulating self-expression, boosting the immune system, reducing blood pressure	Systematic review	Need for clarity of concepts related to culture and mental well-being; lacking in generalization; weak evidence	Leckey, 2011
Adults with mental health conditions	Multiple	Active	Arts on Prescription - Poetry, ceramics, drawing, mosaic, and painting	Improvements in well-being	Observational study		Crone et al., 2013
Adults with mental health conditions	Multiple	Active	Arts on Prescription - Poetry, ceramics, drawing, mosaic and painting	Improvements in well-being	Observational study		Crone et al., 2018
People with aphasia	Music	Active	Choir practice	Singing in a choir had a positive effect on mood, increased confidence and helped to establish peer support networks	Pre-post pilot study		Tamplin et al., 2013b
People with quadriplegia	Music	Active	Therapeutic group singing intervention	Social support and interpersonal ties as antidotes to social isolation and depression, which are both frequent after spinal cord injuries	Randomised controlled trial	The therapeutic singing intervention's regulated, deep breathing may have lowered anxiety and stress	Tamplin et al., 2013a

Target group	Art discipline	Participation	Intervention	Specific outcome	Type of study	Comments, limits and negative outcomes	Reference
Patients with chronic pain	Music	Active	Group singing	Pain reduction, positive feelings, positive social interaction Increased self-esteem, confidence, motivation and empowerment; bonding experiences and positive social interaction among patients with same condition	Qualitative study	Favourable findings might support the introduction of group singing in pain management programmes	Irons et al., 2020a
Elderly in long-term care units	Multiple	Receptive and active	Cultural and creative activities	Bringing meaningfulness into the lives of people in long-term care centres; a new social sense among the elderly people and the nursing personnel	Developmental work research	Culture plan extended to all inpatients following the positive outcomes	Koponen et al., 2018
Theatre-goers aged 18 to 87	Theatre	Receptive	Theatre-going	Increased involvement was associated with psychosocial benefits (social engagement, sense of belonging, etc) that, in turn, were linked to higher state of well-being. Perceived benefits such as social engagement, belonging, and intellectual stimulation	Mixed-methods study	The programme connected individual well-being to community well-being	Meeks et al., 2018
People undergoing cancer treatment	Music	Active	Music therapy in supportive cancer care	Complexity of use of music as a creative therapy in cancer care; Responses to music therapies may vary in dependence to one's identity and socially constructed ideas on aesthetics, creativity, healing and music.	Qualitative study		Daykin et al., 2007
People in need of HIV treatment	Theatre	Active	Drama-based method	Drama enhanced interventions that addressed male participation in HIV treatment and awareness	Reflection-in-action paper		Komakech, 2020
Patients with mood disorders	Dance	Active	Dancing project	Dancing can stimulate positive socialisation behaviours and can discourage isolation. It acts promptly and effectively on the psychological well-being of patients and helps to increase self-esteem	Single case design	Dancing programmes helped to fight the societal stigma that reinforced biases about depressive people and their capacity to feel joy	Tavormina & Tavormina, 2017
Children on the autistic spectrum	Circus	Active	Circus training	Circus training can enhance the social development and well-being of children diagnosed on the autistic spectrum.	Qualitative study		Seymour & Wise, 2017

Target group	Art discipline	Participation	Intervention	Specific outcome	Type of study	Comments, limits and negative outcomes	Reference
School and education							
School-aged children and adolescents	Theatre	Active	School-based drama interventions in health promotion - drama, theatre and role-playing methods	School-based drama or theatre plays can contribute to the increase of knowledge and positive attitudes related to health behaviour among school children	Systematic review		Joronen et al., 2008
Primary-school children	Multiple	Active	School art therapies - music therapy, art therapy, dance movement therapy and drama therapy	Increases in awareness about feelings and mood changes, reflections on emotions and thoughts about self and others, emotional relief and positive feelings, empowerment, self-acceptance	Pilot randomised controlled trial with embedded qualitative and arts-based methods	Story making, storytelling, drawing, puppetry, song writing and empowerment activities had the greatest impact on children's health and well-being.	Moula, 2021
University students	Visual Arts	Active	Sketching - visual creative process simulation	Sketching during the creative process facilitates flow by decreasing perceived effort	Experimental study		Cseh et al., 2016
University students	Literature	Active	Reading a fictional short-story or a non-fictional essay	The self-reported effects of reading a short story showed increases in cognitive empathy, but not in affective empathy. Scores for non-self-reported measures of empathy were higher for frequent fiction-readers.	Experimental Study	Participants with a high baseline level of "openness" reported lower cognitive empathy.	Djicic et al., 2013
College students	Theatre	Active	Drama therapy during group counselling for high-risk students	Improved decision-making, self-awareness, interpersonal and communication skills, self-expression, self-cognitive reconstruction, and social role ability	Experimental study	Self-awareness and decision-making was more positively influenced in males compared with females	Chang et al., 2019
Students	Theatre	Active	Drama-centred, school-based peer education	Drama-focused initiatives can help reduce high-risk behaviours and promote well-being, students being more receptive to prevention messages from other students versus adults	Quantitative study	School-based peer education centred on drama is a promising approach to promote well-being and reduce exposure to violence among urban youth.	Chung et al., 2017
School students, children in need of special education	Multiple	Active	Creative arts therapy programme	Creative arts therapists develop effective school programmes through innovation, research, and collaborative efforts among peers and other professionals.	Case study		Nelson, 2010

Target group	Art discipline	Participation	Intervention	Specific outcome	Type of study	Comments, limits and negative outcomes	Reference
University/college students	Music	Receptive	Online pre-composed music listening	Decreased stress and anxiety	Pilot study	Melody and tempo are the most supportive musical elements	Fiore, 2018
College students	Photography and Film	Receptive	Watching Korean drama (K-drama)	Improved knowledge on school bullying, and improved attitude and behaviour to cope with bullying for those who had been victims of school bullying.	Mixed-methods study	Significant effects on knowledge, attitude and behaviour only in individuals with depressive symptoms or past anxiety.	Ta Park et al., 2020
Preschool and primary school students	Dance	Active	Community dance programme (creative activities centre)	Positive effects on social relations: improved collaboration and communication skills	Interventional study, pre-post design		Eleni & Georgios, 2020
Early childhood: dual language learners	Theatre	Active	Creative drama	Improved cooperation skills, emotion management, social interactions and increased levels of confidence	Mixed-methods case study		Gao et al., 2021
Students	Multiple	Active	Virtual workshops (photography, filmmaking and fashion)	Improved understanding of self and others	Qualitative study		Sclater & Lally, 2013
Students	Multiple	Active	Creative expressive art therapy	Improved communication between different stakeholders from the community	Participatory action research		Fritz et al., 2013
Students with special needs	Multiple	Active	Art therapy in public schools	Empowered students through creativity as a main focus in integrating arts therapies in schools	Project review		Isis et al., 2010
Youth leaders engaged in mental health promotion	Multiple	Active	Arts-based approach; Storytelling	Arts-based approaches used for the social action facilitated youth sharing of personal experiences around stigmatised topics, promoting healing and supporting their growth as leaders	Participatory qualitative case study		Kennedy et al., 2020
<b>Work and occupation</b>							
Professional dancers	Dance	Active	Recreational, ordinary training, and competitive dance	Positive mood change	Experimental study	Dance competition may induce stress and decrease level of enjoyment	Zajenkowski et al., 2015

Target group	Art discipline	Participation	Intervention	Specific outcome	Type of study	Comments, limits and negative outcomes	Reference
Adults	Music	Receptive	Listening to four types of music differing on valence and arousal	Participants who listened to 'happy music' reported higher divergent creativity compared with the control group.	Randomised controlled trial	No effect of music listening on convergent creativity	Ritter & Ferguson, 2017
Working urban adults	Visual Arts	Active	Indoor creative expression with conventional and nature-sourced materials	Accounts of work-related stress relief, enjoyment of the sensory experience, playful and creative behaviour and reflection on life aspects besides work when using natural materials as a symbolic reconnection to nature	Qualitative study		Chang & Netzer, 2019
Working adults	Multiple	Receptive and active	Arts on Prescription: visual art making, music and singing, and theatre and museum or gallery projects	Meaningful effects of Arts on Prescription on mental health and well-being, and of choral singing for improved psychosocial work environment	Scoping review		Jensen et al., 2020
Adults with burnout	Multiple	Active	Drama and improvisation, drawing, photography, dance	Decreased level of burnout, improved well-being, a higher number of positive experiences, and a higher proportion of positive compared to negative experiences	Case study		Cacovean et al., 2021
Older adults in rural area	Visual Arts	Active	Community-based creative arts	Positive impacts on mental well-being: sense of achievement, increased motivation, social connection	Empirical qualitative research	Creative arts as a leisure occupation with significant well-being outcomes to older adults as part of healthy ageing policies, social prescribing	Edwards & Owen-Booth, 2021
Professional contemporary dancers	Dance	Active	Dancing	Dance as a creative collaboration process opened new dimensions of understanding and experience in relation to well-being and self (and other) care	Qualitative study		Purser, 2019
People with dementia and their carers/nursing staff and family members	Music	Receptive	Live music concerts within care facilities	Experiencing live music concerts brings benefits to all those involved with the care of the people living with dementia, increasing their cooperation, interaction and conversation and decreasing their level of agitation	Qualitative study	Caretaker well-being achieved, as people with dementia became more cooperative as result of the art intervention	Shibazaki & Marshall, 2017

Target group	Art discipline	Participation	Intervention	Specific outcome	Type of study	Comments, limits and negative outcomes	Reference
Community health workers	Music	Active	Interactional music making	Skills for building relationships, mobilising members of the community to take responsibility for their own health and to access services, and conducting health-promotion activities	Case study		Dos Santos & Lotter, 2017
People with dementia and their carers	Music	Active	Group singing	Singing supported social inclusiveness regardless of the stage of dementia, a sense of belonging; improved relationship between carer and patient	Qualitative study	All participants were white and of British nationality.	Osman et al., 2016
Caregivers	Theatre	Active	Training through Improvisation	Caregivers were better able to deal with their burdens	Programme description		Leonard & Libera, 2020
Black or bi-racial women who had experienced healthcare inequities, community members and health care professionals	Theatre	Receptive	Theatre production and conversations with audience members	Increased conceptual understanding of inequity, and increased likelihood that participants would implement changes within their own lives in a way that may contribute to the reduction of inequality	Mixed-methods study		Wasmuth et al., 2020
Health care providers and students in the health-care professions	Theatre	Receptive and active	Community informed theatre experience	Prevented discrimination and fostered community empowerment for older LGBT people in care centres	Case study		Hughes et al., 2016
Undergraduate nursing students	Theatre	Active	Monologue-based theatre	Increased empathy	Qualitative study		Baker et al., 2019
Students in a nursing college	Theatre	Receptive	Drama-combined nursing educational content	Improved understanding and empathy for patients	Qualitative study	Better outcomes if programmes broadened to other subjects and recorded on video	Suh et al., 2021
Medical students	Visual Arts	Active	Narrative-based programme	Enhanced reflection on past experiences, personal growth and development; self-discovery; awareness of art as an important tool; enhanced sense of collaboration, enhanced reflection on the human side of illness and medical care, noticeable awareness over the people who experience an illness	Qualitative study		Jones et al., 2017



Target group	Art discipline	Participation	Intervention	Specific outcome	Type of study	Comments, limits and negative outcomes	Reference
Health service workers	Music	Active	Work-place choir	Improved self-perception of mental health and decreased depression rates; enhanced social connectedness; personnel engagement and enjoyment	Mixed-methods study	A professional facilitator and financial costs should be covered. Only a limited segment of the staff, in general with good health and well-being, engaged in attending a work-place choir. Quantitative results are not statistically relevant.	Moss & O'Donoghue, 2020
Students, faculty, and staff of a medical school	Writing	Active	Creation of a creative arts journal	Creative arts publications in the journal encouraged self-expression and strengthened professional relationships.	Qualitative study		Rodríguez et al., 2012
Healthcare staff	Theatre	Active	Drama intervention - improvisation role-play workshops based Forum Play	Perceived increased ability to act according to own moral beliefs towards abuse in healthcare, no change in the number of reported abuse cases within one year	Interventional study, pre-post design		Zbikowski et al., 2020
Health workers	Multiple	Receptive and active	Art therapy, creative art interventions and Arts on Prescription	Physical and mental well-being of people with various conditions including oncologic patients, chronic pain and chronic obstructive pulmonary disease; improved work environment	Literature review		Jensen & Bonde, 2018
Medical students	Theatre	Active	Theatre-based study module	Positive effects on well-being, growth and development as individuals and future physicians, enhanced relationships with peers	Qualitative study		Nagji et al., 2013
Paramedic students	Literature	Active	Writing - creative expressive task	Insight, empathy, relational awareness, heightening ethical sensibilities	Qualitative study		Milligan & Woodley, 2009
Nursing students	Dance	Active	Dance and body movement	Dance and body movement lessons and practice as a promising ground for development of embodied communication with patient; dance facilitated trust, joy, openness, bonding, self-contact and somatic awareness	Qualitative study		Winther et al., 2015
Nurses	Crafts	Active	Knitting	Help with managing stressors, combating compassion fatigue, processing difficult work situations, decrease in burnout scores	Pre-post design		Anderson & Gustavson, 2016

Target group	Art discipline	Participation	Intervention	Specific outcome	Type of study	Comments, limits and negative outcomes	Reference
Hospice social workers	Photography and Film	Active	Photography	Increased job satisfaction, building therapeutic relationships with patients and families	Qualitative study		Shuber & Kok, 2020
Quality of built environments							
General population	Heritage/Museum	Receptive and active	Heritage / historic places and assets (museums, archives, cathedrals, historic houses, residential areas, heritage landscapes, archaeological sites) and associated interventions	Beneficial impacts on the physical, mental, and social well-being of individuals (e.g. increased confidence, social connection and life satisfaction) and communities (e.g. social relations, sense of pride and belonging, empowerment)	Scoping Review	Observed negative effects are often related to inadequate design and delivery in relation with the needs of the target groups.	Pennington et al., 2019
Patients and staff in mental care facilities	Multiple	Receptive	Art, design and environment	Environmental enhancements in healthcare settings can positively impact the health and well-being of staff and patients, providing reassurance and creating identity.	Systematic review	The study highlights other typical environmental factors in healthcare, like excessive noise, that may have negative impacts.	Daykin et al., 2008a
Patients, staff, visitors	Architecture and design	Receptive	Design of healthcare environments	Quality design in healthcare encompasses environmental sustainability and ecological values, social and cultural interactions and values, and resilience of building construction	Scoping review	Need for person-centred, welcoming, accessible and supportive privacy and security care environments	Anåker et al., 2017
General population	Architecture and design	Receptive	Design of public space	Enhanced sense of relaxation and safety	Mixed-methods study		Alyari, 2018
Chinese elderly and youth	Architecture and design	Receptive and Active	Design of a sensory, urban furniture	Increased elderly well-being and cross-generational interaction	Case study		Zhu et al., 2021
City residents	Architecture and design	Receptive	Urban design for mental health	Design of places that are green, active, prosocial and safe; designing public spaces with aesthetic factors and considerations that enhance relaxation and sense of security; enlarging access to green space; public spaces that provide opportunities for physical activities and active transport, as well as for social gathering with facilities appropriate for different age groups	Chapter		McCay et al., 2017

Target group	Art discipline	Participation	Intervention	Specific outcome	Type of study	Comments, limits and negative outcomes	Reference
City residents	Architecture and design	Active	Design of public space around riverfront	Created vibrancy and reduced suicide-related negative connotations around the riverfront	Case study		Spencer et al., 2019
Community development							
Children and youth	Multiple	Active	Art-in-nature activities	Increased nature connectivity and understanding of environmental issues, higher environmental awareness and pro-environmental behaviours, and potential decrease in eco-anxiety	Systematic review		Moula et al., 2022
Urban residence	Multiple	Receptive and active	Cultural events and facilities endowed by the city structure	With their endowments of cultural facilities and activities, as well as their typical levels of cultural participation, urban cultural settings may have a considerable impact on the subjective well-being of residents of medium-sized cities.	Comparative study		Blessi et al., 2016
General population in non-isolated areas	Multiple	Receptive and active	Attending jazz, classical or rock concerts, opera or ballet, theatre, museums, cinema, discos or other dance events, exhibitions, social activities, spectating and practicing sports, reading books, poetry reading	Evidence that cultural access has an impact on psychological well-being (especially if cultural access occurs in a well-balanced mind-body perspective), and that culture provides for some of the most effective predictors of well-being.	Cross-sectional survey	Access to such culture depends on existing opportunities for cultural consumption, the city structure and cultural policies	Grossi et al., 2011
General population	Museum	Receptive and active	Museum and art galleries activities	Museums and art galleries as sites for public-health interventions and health promotion programmes, and the social role of these organisations in health and well-being, Strong positive correlations between cultural activities and health	Narrative synthesis		Camic & Chatterjee, 2013
Cultural institutions	Multiple	Active	Arts on Prescription: multiple art forms	Professional collaboration, enhanced knowledge and professional skills	Qualitative study		Jensen & Bonde, 2020

Target group	Art discipline	Participation	Intervention	Specific outcome	Type of study	Comments, limits and negative outcomes	Reference
General public, health-care providers, policy makers, educators, students, and scholars	Theatre	Receptive	Theatre attending	The audience was engaged from a cognitive and emotional point of view, offered different and informed opinions regarding policy issues	12 nested qualitative case studies		Nisker et al., 2006
People with mental illness in an Australian Macedonian community	Theatre	Receptive	Theatre	Applied theatre is an effective public health-promotion tool - positive community attitudes toward people with mental illness and their families; greater willingness to seek help from health services; greater service utilisation after play was staged	Qualitative study	Language and cultural barriers as obstacles for members of minority communities	Blignault et al., 2010

## 4. Culture and COVID-19

### 4.1 Summary of the findings

There were 12 studies eligible for this scoping review that proved relevant for understanding whether or how arts have benefited people during the COVID-19 pandemic. Among them, five referred to active cultural participation, three to receptive cultural participation and four to both.

The findings showed that arts and creative activities were the preferred leisure activity for people in isolation and promoted increased well-being and resilience. Most studies carried out during the pandemic focused on the effects of creative engagement in the general population.

#### **Creative activities as preferred leisure**

Evidence based on data from 74 countries showed that, during the pandemic, people spent more time on leisure activities – including crafts, languages, cooking, fine arts, music and performing arts – than outdoor activities. Creative activities were preferred to non-creative leisure activities and contributed to well-being to the same extent as physical exercise (Morse et al., 2021).

#### **Innovative strategies to cope with challenges**

Creative arts were used as a buffer for the negative consequences of quarantine and enabled coping with challenges by using innovative strategies (Kapoor & Kaufman, 2020). Engaging with art and creative activities, both actively and receptively, might have helped emotional regulation (Elisondo & Melgar, 2021; Kiernan et al., 2021).

#### **Resilience**

A study suggests creativity as a resilience factor in developing new projects and managing postponed affairs for people during the COVID-19 pandemic (Elisondo, 2021). Singing was used as a strategy for emotional coping and cohesion (Corvo & De Caro, 2020).

#### **Reducing stress and short-term anxiety**

The development of creative activities during isolation and social distancing seemed to have a contribution to the psychological well-being of individuals (Elisondo, 2021). A study which aimed to assess the effectiveness of mediated nature experiences during lockdown (when people were deprived of nature connections) found that watching videos of forest environments was helpful in reducing stress and short-term anxiety, though no long-term benefits were detected (Zabini et al., 2020).

Some studies suggested examples of strategies for managing the consequences of a pandemic that could be taken into consideration with regard to future outbreaks. One such study illustrated the benefits of creative leisure activities on mental health during lockdown (Morse et al., 2021).

Another study found that, during the first months of the pandemic, art consumption increased, with people stating that art helped them to feel better and become relaxed. Active cultural participation during the pandemic was significantly correlated with Positive Affect, while receptive participation was associated with a decrease in negative feelings (Zbranca et al., 2020).

#### **Delivery of public health information**

Art forms used to deliver public health information about COVID-19 in ways that connected emotionally developed social awareness and increased the level of public understanding. Negative effects were also recorded in relation to songs promoting fear or conspiracy theories on COVID-19 and state-sponsored visual art with public-health messaging which compromised public health communication objectives of behaviour change (de-Graft Aikins & Akoi-Jackson, 2020).

## Counteracting negative effects of social isolation

There were also studies evaluating the response of cultural institutions to the pandemic that adapted their programmes to digital or remote access. Museums transformed content and programmes into digital formats to encourage online visitors, which helped with people’s mental health and well-being by counteracting the negative effects of COVID-19, such as social isolation (Tan & Tan, 2021). Boxes of art resources and guided activities for home use delivered to vulnerable families helped parents and infants improve their connection and attachment through playful engagement in the arts, and improved parents’ well-being (Armstrong & Ross, 2021).

### 4.2 Included studies

Target group	Art discipline	Participation	Intervention	Specific outcome	Type of study	Comments, limits, negative outcomes	Reference
General population	Multiple	Active	Creative arts (baking, preparing beverages, watching movies, videos)	Creativity as a buffer for the negative consequences of quarantine; coping with current challenges by using different innovative methods and originality	Hypothesis and theory article		Kapoor & Kaufman, 2020
General population during COVID-19 lockdown	Video	Receptive	Watching a video of forest environments	Stress reduction and short-term anxiety decrease	Experimental study	No long-term benefits	Zabini et al., 2020
General population during the pandemic	Multiple	Active	Creative, non-creative and physical leisure activities	The preference of creative activities over non-creative activities in leisure time; improvement of well-being	Cross-sectional study		Morse et al., 2021
People in quarantine	Multiple	Active	Creative activities (e.g., cooking, gardening, painting)	Increased positive emotions and coping with negative ones	Qualitative study		Elisondo & Melgar, 2021
General population	Multiple	Receptive and active	Artistic creative activities (ACAs) and music engagement	Enhanced emotional regulation and improvement in the mental health and well-being of Australians	Cross-sectional study		Kiernan et al., 2021
General population	Multiple	Receptive and active	Creative activities	Creativity as a resilience factor in creating new and postponed projects and activities, and its key aspects: adaptability, communication, situational control, flexibility	Longitudinal study		Elisondo, 2021

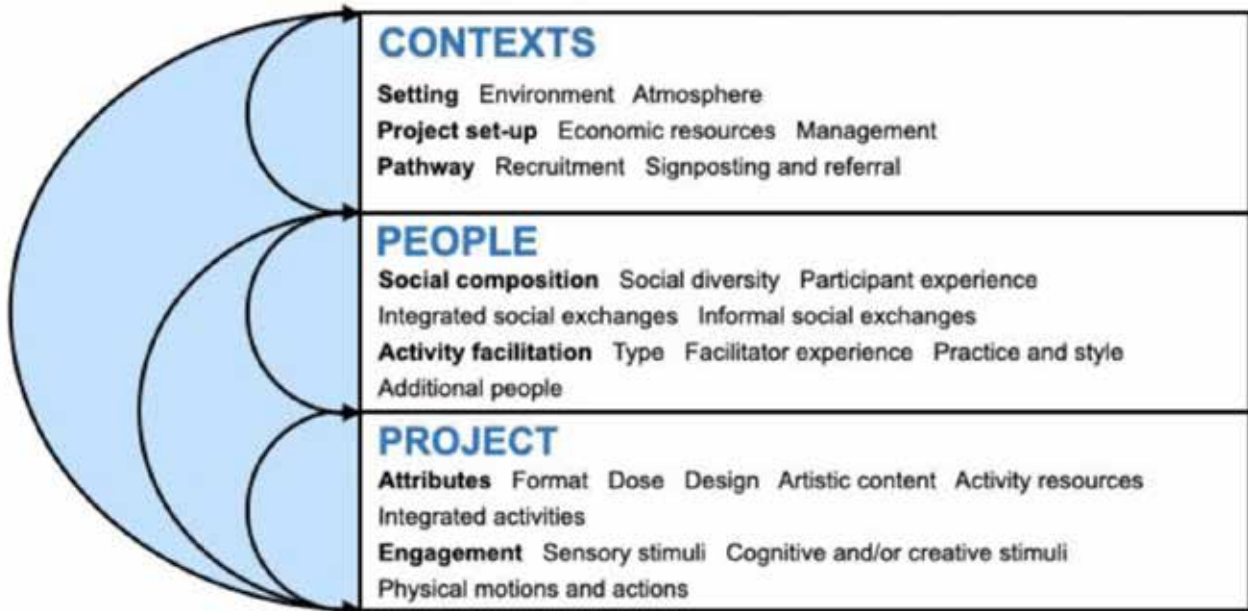
Target group	Art discipline	Participation	Intervention	Specific outcome	Type of study	Comments, limits, negative outcomes	Reference
General population	Multiple	Receptive and active	Creative arts (music, comedy, theatre, dance, music, visual art textile design and literature)	COVID-19 art forms contributed to health promotion, illness prevention and enhancing the aesthetics of the medical setting	Qualitative study	Songs promoting fear or conspiracy theories about COVID-19, and state-sponsored visual art with public health advertisements were considered to compromise communication towards behaviour change	de-Graft Aikins & Akoi-Jackson, 2020
General population	Music	Active	Singing	Emotional coping and cohesion	Opinion piece		Corvo & De Caro, 2020
Vulnerable parents and infants	Multiple	Active	Art boxes	Parents reported more confidence and undertaking new activities which they planned to continue, increased positive playful moments and improvements to their general well-being and connectedness	Mixed-methods study		Armstrong & Ross, 2021
Doctors, health workers and medical students	Photography and Film	Receptive	Watching short videos with recommendations for an objective view over reality	An educational strategy for helping doctors, health workers and medical students to work with efficiency and serenity in their clinical settings is suggested as promising during the COVID-19 pandemic. Emerging themes - gratitude, inspiration for daily work, similarities between real life situations and video contents and need for meaning.	Qualitative study		Blasco et al., 2021
General population	Multiple	Receptive and active	Cultural participation	Art consumption increased; art helped people feel better and become relaxed; improvement in positive and negative affect scores; resilience	Mixed-methods study		Zbranca et al., 2020
Museums	Museum	Receptive	Digitisation of museum content and programmes	Counteracting the negative effects of COVID-19, such as social isolation and distress, and supporting mental health and well-being	Short communication (Review)		Tan & Tan, 2021



# **FACTORS INFLUENCING THE EFFECTIVENESS OF INTERVENTIONS**

Besides identifying the well-being outcomes of arts and cultural activities, we aimed to extract and analyse information on the determinants of success and failure of such activities. Below, we present lessons from the studies included in our scoping review using the broader categories proposed by the INNATE Framework (Warran et al., 2022), the most comprehensive framework for the design, implementation and assessment of arts in health activities. The framework includes 139 “active ingredients” of arts in health activities, grouped under three headings: People, Project and Contexts.

Figure 2 The INNATE Framework: active ingredient categories, subcategories and interconnections



Source: (Warran et al., 2022)

We also present some observations that the studies' authors have made regarding factors that seemed to support effective arts interventions. Since not all the studies included such observations, some of the suggestions may only apply to specific contexts and situations. Moreover, for the same reasons, the list below does not cover all the factors that could determine the success of an intervention.

## A. Context

Context-related factors presented here include the location and environment where the projects or interventions took place, the project set-up (e.g., the initiating organisations and types of partnerships enabling the project) and the pathways for the recruitment of participants.

### Setting

Many of the studies did not offer explicit information about the place or context of the interventions. Among those that did give such details, the most frequently used environments were cultural spaces and contexts (e.g., art venues and public spaces during festivals), in addition to schools, community centres, and healthcare spaces such as hospitals and care centres. Some studies referred to home-based activities, while others referred to online cultural participation.

Ørjasæter & Ness (2017) highlight the importance of having access to art-based activities in the proximity of mental health hospitals, regardless of admission status. The authors claim that 'cultural leisure activities should remain independent from therapy and be run by people with professional artistic backgrounds'. These conditions enable 'illness-free zones' which restore personal dignity, and give participants chances to be treated as artists and citizens, rather than just being treated as patients. At the same time, it is equally important to reach people where they already are, especially in the case of groups that spend a long time in spaces they cannot leave (such as schools, hospitals, refugee

centres, elderly homes or care centres for children with disabilities). In this context, the presence of art and artists can sustainably transform care and learning environments.

For people with mental illness, changing location of activities from clinical settings to museums or public spaces could prove more effective (Saavedra et al., 2018). Using a community venue that is associated by some people in the community with experiences of exclusion or authority may negatively influence attendance (Swe et al., 2020).

## Set-up

Our review analysed research studies that aimed to measure the effects of arts on health and well-being. Some of the studies have designed interventions for the purpose of research, and others aimed to assess cultural projects or voluntary participation in culture. Thus, there is little information about the management and resources of the projects and interventions analysed. Some interventions have been carried out by universities and research institutes, some by health institutions and others by arts and community organisations, most of which were public or benefited from public support.

Partnerships between sectors such as the arts and health, social welfare, urban development and academic sectors, are of the utmost importance. Certain factors, such as resources, policies and community champions, are influential for sustainability of these initiatives. Jensen (2018b) describes interdisciplinary work in the arts and health as complex, and points out that the fact that these sectors operate based on different institutional logics is a source of challenges.

In the case of interventions in healthcare institutions, the staff needs to be accurately informed about the programme and its potential outcomes, and different departments inside the institution need to be onboard with the process to ensure success. Changes of roles in a management team and commitment withdrawal from key personnel regarding the intervention during a process can have negative impacts on the effectiveness of its implementation (Bolmsjö et al., 2014). Disruptions during interventions taking place in care centres and health institutions may occur (van Dijk et al., 2012).

## Pathways

Most of the studies recruited participants for the purpose of the study. Around 40 studies described using a formal referral programme through healthcare or social organisations. The beneficiaries of these projects are people with health problems or those who are at risk of exclusion. A similar number of studies referred to cultural or community activity contexts where individuals participated by choice, such as singing in a choir or going to performances. A smaller number of interventions took place within universities and professional training programmes, where people were already enrolled.

In cases where the recruitment of participants is done through public communication channels, finding the right channels and language to address beneficiaries (e.g., limiting the use of technical or medical terms) plays an important role. There are also ethical and legal aspects to manage with care, such as the handling of personal data and images (that is, GDPR compliance) and collecting participant or parental consent prior to an intervention (Cacovean et al., 2021). Some people may perceive referral to an activity as negative (Barnes, 2014).

## B. People

Here we have grouped findings based on those involved in the cultural activities. These are the participants or beneficiaries on the one hand, and facilitators (organisers, artists, trainers, mediators and support staff), on the other.

### Participants

The studied interventions involved various population samples from all continents. They included mothers and infants, pre-school children, children, adolescents and youth, adults and older individuals, students of all ages in learning contexts and working adults. There are interventions focused on women (e.g., older women, women with cancer) or men (e.g., men in rehabilitation programmes), disadvantaged population segments (e.g., people living in poverty or people living in remote areas), people with disabilities and people with different health conditions.

Sample sizes varied from 3–5 individuals in case studies up to 8–20 people in group interventions, and larger samples (e.g. 100, 3,000, 12,000, 50,000) in the case of cross-sectional studies.

Considerations related to equitable and inclusive access to culture, social support and healthcare needed to be taken into account. Barriers to enrolment and engagement can include the lack of a safe and healthy household appropriate for health-promotion activities (de-Graft Aikins & Akoi-Jackson, 2020), insufficient materials and proper sanitation of objects used during activities (Teksoz et al., 2017), and lack of access and literacy related to internet services and technology (Tan & Tan, 2021; Dowson & Schneider, 2021). They also include existing health conditions and the financial cost for travelling to and from activities (Britten et al., 2017).

### Facilitation

A variety of approaches is being presented by the reviewed studies. There are initiatives where the cultural experience is designed and delivered by artists or where participants co-create the intervention with the artists. Activities such as creative workshops or art classes are facilitated by artists or art educators. In the case of art and creative therapies, the interventions are led by trained and certified art therapists. Experimental contexts also involved medical staff, psychotherapists and social workers engaging with creative methodologies or collaborating with artists. Projects involving arts in public space and urban design are led by designers, artists and architects.

Collaboration between the artist or art facilitator and the medical care team is necessary in the case of health-related interventions, given the different skills each type of professional can bring to the process (Goldenberg, 2018). Health professionals involved in arts and health activities would benefit from training to learn how to make use of creative activities (Thompson & Kreuter, 2014), and are encouraged to partner with artists and cultural organisations (Yuen et al., 2011).

The key to an effective intervention is an arts leader with the appropriate training, skills and competencies to support participants (Lewis et al., 2016; Moss et al., 2018). Facilitators are advised to adapt the content of the creative interventions to the participants' needs and health-promotion goals (Yuen et al., 2011).

Research on the effects of art-based interventions on people with specific health conditions is only possible if researchers have a sufficient understanding of these medical conditions. Thus, an interdisciplinary approach, including medicine, art or art therapy, psychology and education, is recommended (Gick & Nicol, 2016). Caregivers may be intimidated by research observations being made (van Dijk et al., 2012).

Bringing cultural interventions in healthcare institutions may be met with resistance by medical staff and caregivers, who are sceptical about the success of such programmes, may hesitate to participate in the project because of lack of art-related skills, and may find the process too demanding in terms of time and energy (Zeisel et al., 2018). The staff needs to be accurately informed on the programme and its potential outcomes (Bolmsjö et al., 2014). The complex setting of projects and the involvement of many professionals, researchers and artists might confuse participants (Bolmsjö et al., 2014). Participants may have a preference in relation to the activity group they are being assigned to (Moss et al., 2018).

## C. Project

In the Project category, we presented our observations related to the design of the interventions and the determinants for success and failure mentioned by the authors of the studies. These correspond to Project Attributes in the INNATE framework. Aspects related to Engagement are mentioned in the description of the various attributes.

### Format

There are a variety of intervention formats mentioned in the studies. Below, we present a non-exhaustive list of formats, including occasional or regular cultural participation activities (e.g., playing an instrument, choir singing and reading groups), creative workshops, art classes, processes involving a series of meetings of creative exploration leading to the production of an artwork or performance, and art therapy in individual or group settings.

The formats also are specific to the type of art disciplines involved:

- Dance: dance classes, social dancing (e.g., ballroom, Latin, Tango, improvisation, hip hop), community dancing, body movement and movement therapy;
- Music: choir singing, community singing, workplace choir, therapeutic group singing, singing interventions, online group singing, playing a musical instrument, collaborative composition workshops, interventional music making, composition and performance, recorded and live music listening, live music performances within care facilities, brainwave music listening, sound installation, music therapy and singing bowls therapy;
- Literature: reading groups, individual reading, creative writing and journaling;
- Storytelling: sharing oral stories, digital storytelling, transmedia games and legacy video creation;
- Architecture and design: design of healthcare environments, urban design, urban installation, urban furniture and the design of public space;
- Photography and Film: photo-a-day practice, photo voice, photography based storytelling, filmmaking, watching video and TV content;
- Museum: guided tours and discussions, group visits followed by creative workshops, arts and nature museum intervention, art intervention;
- Theatre: monologue-based theatre, shared personal stories through drama, drama based interventions at community level, transforming qualitative health research data into dramatic form, self-revelatory performance, drama therapy, drama-centred school-based peer education, interactive drama, folk theatre, applied theatre, playback theatre group, attending theatre performances, creative arts therapy, forum theatre, theatre production and conversations with audience members, acting classes, and abstract Scripted-IMPROV;
- Circus: clown interventions and circus training;
- Visual Arts: viewing a visual artwork; drawing, painting, sketching and crafts; visual storytelling, drawing the disease, exhibition and exhibition visits, visual arts classes, participatory arts project, creative visual arts workshop and interactive drawing;
- Multiple art forms: attending cultural events and facilities endowed in the city's structure, creative workshops combining multiple art forms, art classes, creative art interventions, Creative Expressive Art Therapy, community arts, community language radio, art-in-nature activities, community festivals and community arts installation.

### Dose

Among the reviewed studies, more than two-thirds involved multiple participation occasions. These took different formats depending on the programme objectives. Programmes taking place in a healthcare context included a minimum of six sessions, and, most frequently, 10–12 weekly sessions. There were also interventions that involved daily or multiple sessions per week for a longer period of time, such as six months or one year.

Most of the studies on cultural participation programmes taking place in arts and community centres also involved multiple visits from the beneficiaries.

A smaller number of the studies involved one-off participation in cultural events, such as theatrical performances or festivals, and in specific healthcare situations, such as during blood sampling or diagnosis.

For instance, in the context of a ten-sessions pottery workshop for people with dementia, findings suggested that participation could improve certain dimensions of well-being over a period of several weeks, and that the maximum impact on those variables were achieved after only three sessions (Pérez-Sáez et al., 2020). In the case of a singing intervention for people with respiratory disease, the greatest effect was obtained through long-term weekly lessons, with the additional advice of practising between lessons (Goldenberg, 2018). Projects may at times be perceived as overwhelming, especially if they involve many activities and steps (Baker et al., 2019).

## Design

The design of the interventions should be adapted in accordance with the expected outcomes, especially in the case of activities aimed at physical and mental health. A good understanding of the needs and social conditions of the target group is needed.

## Type of participation

More than two thirds of the studies included in this scoping review referred to art-based interventions that actively involved beneficiaries in the creative process. The most effective type of interventions in terms of health and well-being seemed to rely on active participation.

Receptive participation was also found to produce valuable effects, as it was the case with experiences of music listening (Fiore, 2018) and watching visual artworks (Law et al., 2021), which can have a calming and stress-reducing effect in specific conditions. Note that measuring the contribution to health or well-being of receptive voluntary engagement with the arts was more difficult than targeted interventions, since the factors influencing the production of outcomes were more difficult to isolate and control.

## Individual or Group Setting

Out of the studies that offer such details, around one-quarter referred to individual cultural experiences (e.g., drawing, painting, digital arts or art therapy), half took place in a group situation (theatre-based activities, dance, group singing or group workshops) and another quarter combined individual with group cultural engagement opportunities (e.g., art classes followed by individual practice). The choice of setting by programme designers was related to the desired outcomes, and no particular approach in this respect was superior to another.

Absenteeism was a challenge for conducting an activity in a small group (Moors et al., 2020). Group lessons and a positive student-teacher relationship, which offered social interaction and support, seemed to be important factors for reducing the chances of drop-out (Goldenberg, 2018).

To engage students in an extra-curricular activity, creating a club to facilitate and improve social connection in an informal context proved useful, while schedule conflicts made it impossible for some students to take part in all of the sessions (Stockwell, 2016).

Working in smaller groups to enable opportunities for self-expression to each participant was important. There were also sensitive aspects to take into account. For instance, in a school programme, breaking the class into groups made some students upset (Ahmed & Schwind, 2018). Another school project found that an open and flexible group setting helped to create a trustful and supportive environment, in which students could express themselves without fear of judgement (Vitalaki et al., 2018). School programmes which used peer leaders and had also a community dimension were recommended (Joronen et al., 2008).

In the case of creative activities for adults with severe mental health problems and complex needs, group work raised tensions due to individual preferences (Slattery et al., 2020).

## Artistic content and integrated activities

Artistic content is generally concerned with the essential meaning or aesthetic value of a work of art, and the emotional or intellectual message of an artwork. The arts and culture activities covered by the studies in the scoping review are very diverse. In some cases, studies assessed the impact of participation in activities of cultural institutions such as theatres, museums and cinemas, and reflected a diversity of artistic expressions. In other cases, the artistic

content was shaped in relation to specific aims and needs. In both cases, the quality of the artworks and of art interventions is important. Yet, when tailor-made interventions were created to support social and health outcomes, the artistic content became secondary.

Similarly, the process of artmaking and engagement with the arts played a key role. When designing the format and content of interventions, involving participants in the creative/co-creative process is important.

Co-creation processes can be empowering, but they can also be affected by power dynamics (Sonn et al., 2015). Certain population groups tended not to engage as eagerly with certain forms of artmaking which were not perceived as desirable in their social circle (Murray & Crummett, 2010). Performance anxiety was perceived as challenging in group singing (Williams et al., 2018), drama based activities (Bolmsjö et al., 2014, Baker et al., 2019) and dancing (Zajenkowski et al., 2015). Thus enjoyment and the quality of experience of participants needs to be prioritised.

Music-based interventions in health settings seem to be well accepted and perceived as a positive experience (Caprilli et al., 2007). Negative feelings such as frustration due to choice of songs or limited personal abilities, fatigue due to the length of meetings and physical discomfort (e.g., an irritated throat) can be experienced by some people during activities such as singing (Abell et al., 2017).

Social interaction was facilitated by projects that involved sharing stories (Pearce & Lillyman, 2015). Yet, sharing experiences can sometimes make people feel more vulnerable and anxious (Flicker et al., 2020). When writing stories for health promotion, suggested techniques include choosing a point of view (whether first or third person), establishing the conflict scenario, shaping the story, adding details, focusing on emotions and asking for feedback constantly (Thompson & Kreuter, 2014). Art practices that proved supportive in therapeutic interventions for people with depression used non-verbal components that were able to bypass language barriers, as well as culturally adapted uses of art and creativity that were able to reduce stigma and integrate psychological support (Omylinska-Thurston et al., 2021).

A study showed that moderate exercise (e.g., a warm-up) before a dance activity may increase available attentional resources required for the efficient performance (Zajenkowski et al., 2015).

With regards to public spaces, aesthetic factors and considerations that enhanced relaxation and the sense of security, enlarged access to green space, and provided opportunities for physical activities and social gathering, with facilities appropriate for different age groups, are needed (McCay et al., 2017; Centre for Urban Design and Mental Health, 2016).

Designing public spaces based on aesthetic understanding of citizens' preferences, with soothing colours or near green spaces, can assist in relaxation (Alyari, 2018). The involvement of communities throughout the design, prototyping and implementation phases supported the adoption of urban solutions once finalised (Spencer et al., 2019). In a healthcare context, environmental conditions such as noise levels and natural light may influence people's experience (Daykin et al., 2008a). Spaces would need to be person-centred, welcoming and accessible to support a sense of privacy and safety for patients and staff (Anåker et al., 2017).

Online activities could be perceived as less personal, since online interaction among participants was more challenging, thus achieving desired psychological and social effects was more difficult. Technological barriers prevented some people from participating, which in a wider perspective implied a limited access to digital health and social resources. The decision not to engage in online activities was also related to the fact that the noise created at home during online participation could disturb neighbours (Philip et al., 2020).

There were promising results that digital interventions such as remotely-delivered music therapy can prove effective. Technology use in the case of elderly people with dementia involves possible obstacles, the interventions need to be adapted to the capacity of the users (Dowson & Schneider, 2021). Online interventions made it impossible to control the physical environment (noise, conditions and access to materials or instruments) that may vary between participants and could influence their engagement (Fiore, 2018). An important aspect to take into consideration is the access and literacy of people to internet services and technology (Tan & Tan, 2021).

## Activity resources and materials

A few of the studies also refer to the type of materials involved in the activities, but in general the information in this respect is scarce.

Nature-sourced materials appeared useful for inspiring a reconnection to nature (Chang & Netzer, 2019). In a healthcare setting, every patient needs their own materials and these must be appropriately disinfected between uses (Teksoz et al., 2017).



When using recorded music in interventions, the quality of earphones or speakers may influence the experience (Fiore, 2018). During interventions relying on technology, aspects to take into account are internet/technology access and literacy (Tan & Tan, 2021; Dowson & Schneider, 2021).

Standard tools used in arts and creative activities may be a cause of frustration for people with physical or motor impairments. The need to use adequate tools, and moreover, to involve users in co-designing products and services adapted for their needs was noted. This was the case of a photography programme for people with aphasia which signalled the various obstacles a standard photo camera may pose for stroke survivors (Levin et al., 2007). Management and logistical challenges have been observed in healthcare settings, especially in the case of activities for beneficiaries with a high level of dependency, leading to overstretching of human and material resources (Fenech, 2009).

## Research and evaluation of activities

Many studies included in the scoping review were set up to evaluate the effects of cultural activities, making use of experimental or well-established instruments to assess well-being, quality of life and health indicators. When looking to replicate existing interventions or set up projects aimed at improving levels of health and well-being, interested practitioners or researchers should access the original studies for accurate and complete details on a specific intervention or design, and follow indications on the methodological limitations and recommendations for future research.

One of the challenges for the assessment of interventions is that it is difficult to differentiate the effect of the art-related intervention from that of other factors, like ongoing medical treatment or the environment (Goldenberg, 2018). Another challenge is the self-selection bias, in the case of self-reported questionnaires, when researchers cannot control how accurately people complete the assessments (Morse et al., 2021).

# DISCUSSION

The present scoping review included 310 documents with different methodologies, including meta-analysis, systematic reviews, scoping reviews, randomised controlled trials, non-randomised/quasi-experimental observational studies, mixed-methods studies, text and expert opinion papers, qualitative studies and policy reports. They were conducted around the world, on all continents, with most papers coming from the UK, European Union Member States, the USA, and Canada. There were some studies carried out in two or more countries.

To answer our research questions about what the existing evidence is regarding the effects of culture on health and well-being, and which specific forms of cultural participation appear to have a more positive impact, we analysed and extracted well-being outcomes and grouped them under four main themes:

1. **Culture and Health**
2. **Culture and Subjective Well-being**
3. **Culture and Community Well-being**
4. **Culture and COVID-19**

Evidence from a total of 138 studies was included in the Culture and Health chapter, with 118 in Culture and Subjective well-being, 131 in Culture and Community Well-being and 12 in Culture and COVID-19. Several articles have been included in two or more chapters since they presented outcomes with relevance to more than one theme.

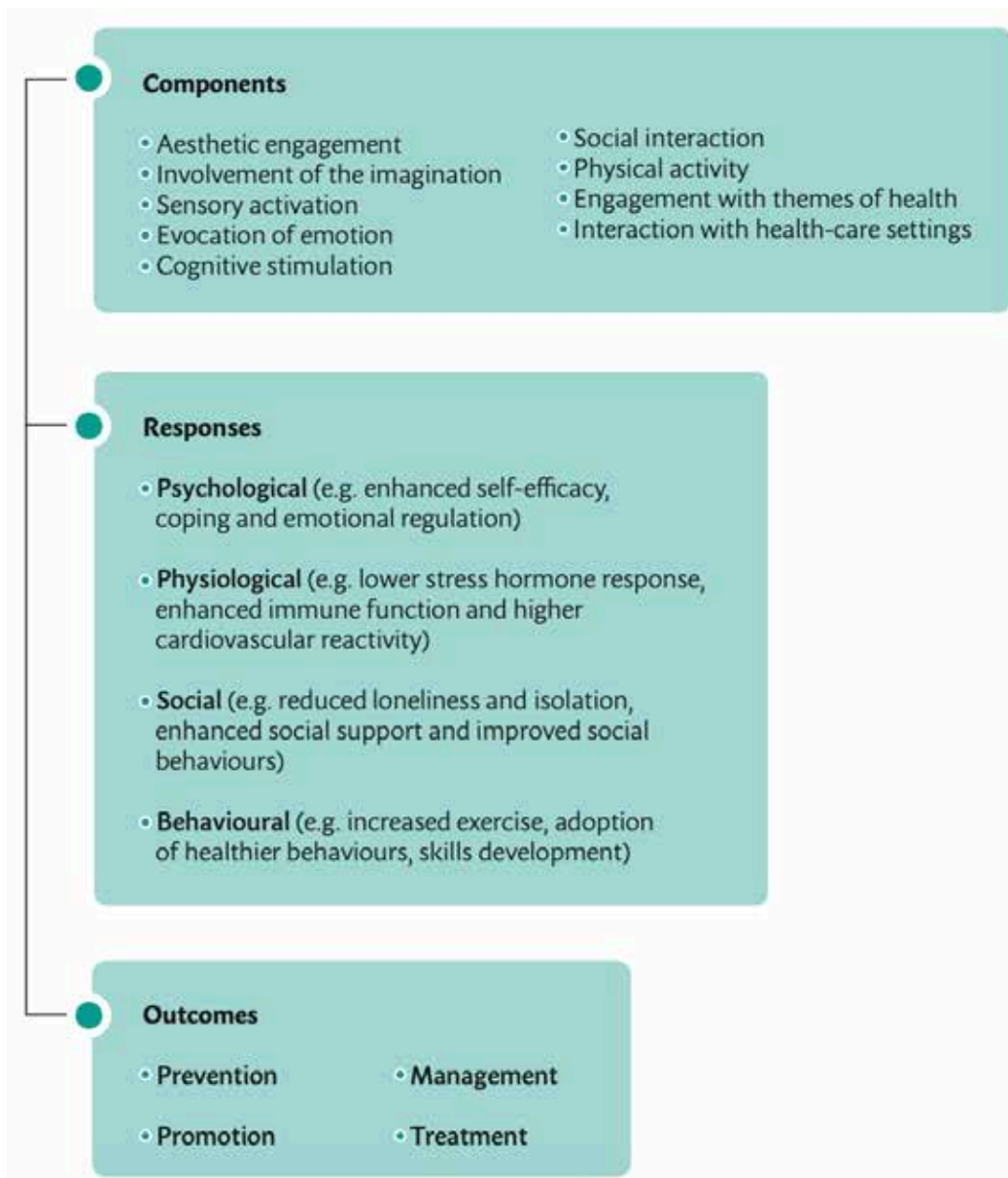
*Table 2. Number of studies with evidence of art-related well-being outcomes included under the four thematic headings.*

<b>Thematic chapter</b>	<b>N° of studies included</b>
<b>Culture and Health</b>	<b>138</b>
<b>Culture and Subjective well-being</b>	<b>118</b>
<b>Culture and Community well-being</b>	<b>131</b>
<b>Culture and COVID-19</b>	<b>12</b>

Many articles were relevant for more than one of our focus areas, showing that cultural engagement with the arts may generate complex well-being related outcomes. This complexity is captured via different research methods. The research methodology chosen changed depending on the specific outcomes that studies set out to measure, and in relation to the various definitions of well-being. Broadly speaking, benefits were considered at the individual (micro), organisational (meso) and community (macro) levels.

According to the theoretical model proposed by the WHO Report (Fancourt & Finn, 2019), arts activities can be seen as complex, multimodal interventions, involving different types of engagement mechanisms that facilitate health and well-being outcomes. Arts activities can involve aesthetic engagement, imagination stimulation, sensory activation, cognitive stimulation, social interaction, physical activity or engagement with health or well-being related themes or settings. These components can determine multiple responses at psychological, physiological, social and behavioural level, thus mediating health and well-being outcomes (Fancourt & Finn, 2019).

Figure 3. A logic model linking the arts and health.



Source: World Health Organisation (Fancourt & Finn, 2019).

Most of the clinical trials and experimental studies included measured effects at the individual level in the context of a specific group, and only a limited number of articles set out to explore community-level impact. Thus, some considerations regarding collective well-being in this report were made based on effects at the individual level (e.g. reduction of stress in students or improved physiological measures in elderly adults), and which have the potential to produce wider community benefits when scaled up (e.g., social inclusion, more equitable access to healthcare or community services).

## (a) What is the existing evidence of the effects of culture on health and well-being?

To present our findings in a condensed form was difficult, since the complexity of interventions and their outcomes combined with the diversity of research approaches cannot be captured in brief or presented from a single perspective. Thus, in the following pages we present a summary of our findings from different perspectives. Table 3 presents the overview of outcomes, structured around the main four themes. Table 4 presents a summary of the health and well-being outcomes backed by evidence from systematic reviews, meta-analyses and randomised control trials, which are generally considered as strong evidence in a biomedical context.

*Table 3. Categories of health and well-being outcome associated with arts and cultural participation, identified by the scoping review.*

### 1. Culture and health

#### a. Prevention and Promotion

Healthy living and health-promoting behaviours  
Health communication  
Prevention of ill health  
Maternal mental health and mother-infant bonding  
Care-giving

#### B. Management and Treatment

Mental health conditions  
Neurodevelopmental and neurological disorders  
Noncommunicable diseases  
Acute conditions

### 2. Culture and subjective well-being

#### A. Personal Fulfilment and Engagement

Acquiring and developing skills  
Self-expression  
Empowerment  
Increased social engagement, bonding and inclusion  
Sense of identity and belonging

#### B. Personal Orientation

Resilience  
Positive behaviours  
Empathy  
Confidence and Self-Value

#### C. Experiences of Emotions

Improved mood  
Positive emotions  
Emotional regulation  
Reduced anxiety and depression  
Reduced stress, improved relaxation and flow  
Bereavement support

#### D. Personal Evaluations of Life

Improved well-being and quality of life  
Life satisfaction and motivation  
Finding of meaning  
Improved knowledge and reflectivity

### 3. Culture and community well-being

#### A. Social Inclusion

Social bonding and inclusion  
Inclusion of disadvantaged groups  
Increasing social engagement and reducing isolation  
Reducing stigma  
Well-being and inclusion of refugees

#### B. School- and Work-related Well-being

School-related well-being  
Work-related well-being

#### C. Local development

Well-being and quality of life  
Active citizenship  
City cultural profile and well-being

#### D. Built Environment and Well-being

Built heritage  
Environmental design in healthcare  
Public space design

### 4. Culture and Covid-19

Creative activities as preferred leisure  
Innovative strategies to cope with challenges  
Resilience  
Reducing stress and short-term anxiety  
Delivery of public health information  
Counteract negative effects of social isolation

In the table below, we summarise the evidence from systematic reviews, meta-analyses and randomised controlled trials regarding the relevance of arts and cultural participation to improving health and well-being.

*Table 4. Art-related health and well-being outcomes supported by evidence from systematic reviews, meta-analyses and randomised control trials.*

#### **Associations are found between:**

Cultural participation AND Health promotion

Cultural participation both receptive and active AND Quality of life in people of all ages

Cultural participation AND General and psychological well-being of people both healthy and suffering from illness

Engagement with music, dance, reading and visual arts AND Physical, psychological, and social well-being

Active cultural participation of elderly people AND Increased social engagement, decreased anxiety and depression, and improved functioning

Engaging in creative activities and art therapies AND Improved health related quality of life in patients with chronic health conditions

Arts activities AND Prevention of further cognitive decline and ageing support for elderly adults with cognitive impairments

Singing AND Physical, psychological and social benefits for people with chronic obstructive pulmonary diseases

Singing-based early postpartum interventions AND Improved maternal emotional state and mother-infant bonding

Art and environmental design in mental health care units AND Improved well-being of patients and staff and improved perceptions of the healthcare environment

Listening to music AND Reduced anxiety before and after surgery

Use of arts AND Support in pain reduction and pain management

Participation in the arts AND an improved sense of belonging

Engagement with art AND Life satisfaction

Engagement with art AND Decrease in anxiety and depression levels

Engagement with art AND Improved mood

Engagement with art AND Increased confidence and self-esteem

## (b) Which specific forms of cultural participation appear to have a more positive impact?

Our scoping review also aimed to identify the types of cultural experience in order to understand which formats of intervention may prove more effective.

Table 5. Number of studies by type of cultural participation.

Thematic chapter	N° of studies included	Active cultural participation	Receptive cultural participation	Active and receptive cultural participation
Culture and Health	138	105	16	16
Culture and Subjective well-being	118	93	13	12
Culture and Community well-being	131	103	17	11
Culture and COVID-19	12	5	3	4

More than two-thirds of the studies included in this scoping review referred to art-based interventions that actively involve beneficiaries in the creative process. The most effective type of interventions in terms of health and well-being seemed to rely on active participation. Receptive participation is also found to produce valuable effects, as is the case with experiences of listening to music and watching visual artworks – an experience that can have a calming and stress-reduction effect in specific conditions. One has to bear in mind that measuring the contribution to health or well-being of receptive voluntary engagement with the arts is more difficult than targeted interventions, since the factors influencing the production of outcomes are more difficult to isolate and control. While most of the evidence favours active cultural participation, a large population study showed a small but consistently stronger relation between receptive cultural activities and improved scores for life satisfaction, anxiety and depression (Cuyppers et al., 2012).

Receptive cultural experiences had a certain potential to support health promotion, especially by providing creative means for health communication, such as improved knowledge and an understanding of health-related subjects. In specific cases, activities like music listening may also have benefits in terms of pain management (Huang et al., 2016), improved physiological measurements (Stanhope & Weinstein, 2020) and reduced anxiety around medical procedures (Caprilli et al., 2007). There are also positive associations between overall cultural participation, involving both receptive and active forms, and self-reported health or life satisfaction (Hansen et al., 2015, Weziak-Bialowolska & Bialowolski, 2016), yet no causative relation between voluntary cultural engagement and health could be identified (Weziak-Bialowolska & Bialowolski, 2016). The vast majority of studies show that active engagement with arts and creative activities was necessary to produce health and well-being outcomes.

Among the studies screened, certain art forms and intervention models appeared more frequently. This does not necessarily mean that other art-based approaches were less effective, but that they may have been less studied or less represented in the databases we searched as our resources.



Table 6. Art disciplines and associated outcomes.

Art discipline	Associated outcomes
<p><b>Music</b></p>	<p>Active and receptive engagement with music can improve physical, psychological, and social well-being;</p> <p>Group singing can support the well-being and health of people with respiratory conditions, people with Parkinson’s and dementia, and of elderly people in general;</p> <p>Singing-based interventions are used to support improving maternal emotional states;</p> <p>Playing a musical instrument requiring long-term engagement is associated with cognitive benefits in adults;</p> <p>Music/singing can enable development of resilience in adults;</p> <p>Music listening may facilitate pain and stress reduction;</p> <p>Benefits of singing at personal level: positive emotional outcomes, social engagement and connection and increased quality of life;</p> <p>Social benefits of singing: building social support, enabling collaboration, providing a sense of identity and belonging, preventing social isolation, improving social functioning, promoting community development, helping reduce inequalities and fostering solidarity and cohesion and improving access to healthcare and arts.</p>
<p><b>Theatre</b></p>	<p>Active participation in drama activities (acting classes, improvisation) can foster co-operation and communication skills, social engagement, self-expression and positive mood;</p> <p>Theatre was often used for health communication. Drama based activities can support mental health promotion and help with destigmatising certain health-conditions;</p> <p>Receptive participation in theatre productions is especially suited for prevention-focused messages or as a tool to engage audiences that are part of marginal groups, and, therefore, do not benefit from equal access to health information.</p>
<p><b>Dance</b></p>	<p>Dance can support physical, psychological, and social well-being;</p> <p>Dance may increase social engagement and physical functioning in older age;</p> <p>Dance can encourage social competences and a reduction of risk behaviours in youth;</p> <p>Dance was used in the management of Parkinson’s disease (physical and psycho-social outcomes).</p>
<p><b>Visual Arts</b></p>	<p>Visual arts can enable physical, psychological, and social well-being;</p> <p>Visual arts in various forms – e.g., drawing, painting and photography – were used to help patients express their physical and emotional states. They can also facilitate self-reflection and the finding of meaning for people with various health conditions including cancer and diabetes;</p> <p>Viewing an artwork may reduce stress;</p> <p>Active engagement in visual arts activities can enable self-expression, self-reflection, social inclusion and empowerment, and can help overcome communication barriers.</p>

<p><b>Literature</b></p>	<p>Reading and writing can improve psychological and social well-being; Writing can enable self-expression; Reading was associated with the finding of meaning and reduction of risk behaviours; Reading may support development of empathy among students and adults; Storytelling (including digital storytelling) may enable liberation from disempowering identities for refugees and people fighting disease, assist people with sense making in difficult situations and promote interpersonal closeness.</p>
<p><b>Circus activities and clowning</b></p>	<p>Circus training may support the well-being of children and youth and can enable their social inclusion. Clowns' interventions can be effective in reduction of anxiety and stress in hospitalised patients and their parents.</p>
<p><b>Photography and Film</b></p>	<p>Photography can be used as therapeutic support for people with mental illness, enabling reflection and selfactualisation; Photography activities may enable self-expression, empowerment and communication in young people; Watching films and videos can facilitate knowledge acquiring and relaxation; Films and video recordings could be used as vehicles for health promotion and education, especially in relation to youth due to the accessibility of this medium.</p>
<p><b>Creative activities</b></p>	<p>Creative activities can cultivate creative skills that might support personal and professional development; Creative activities can facilitate work-related well-being; Engaging with creative activities was a way to cope with difficulties during the COVID-19 pandemic, as a resource for innovative solutions; Participation in arts festivals and community events can generate well-being at a community level; Arts organised as social events could help fight isolation, especially in the cases of elderly people or people with chronic illness; Creative art therapies, combining multiple arts techniques and actively engaging participants, were used as complementary therapies in various healthcare settings; Engaging in creative activities and art therapies may contribute to improved health related quality of life in patients with different health conditions.</p>
<p><b>Museum, heritage sites and art venues</b></p>	<p>Publicly available infrastructure – e.g., art venues, community centres and other public spaces – could play a key role in facilitating community arts and well-being; Museums and art galleries were identified as having an important social role for health promotion, well-being and social inclusion; Heritage and heritage related activities can have physical, mental, and social benefits for individuals and communities; The aesthetic experiences related to visiting a cultural heritage site can enable stress reduction and well-being increase.</p>
<p><b>Architecture, heritage and design</b></p>	<p>The quality of design of built environments was found to influence people's experiences in healthcare settings, impacting well-being and social connections; Urban design was proposed as a mediation tool for tackling urban social issues.</p>

Below, we summarise some observations that the studies' authors have made on factors that seem to support effective arts interventions.

The cultural experiences presented by the studies most frequently took place in cultural spaces and contexts (e.g., art venues or public spaces during festivals), schools and community centres, and healthcare spaces such as hospitals and care centres. There was also a fair number of projects referring to home-based activities, and a few referring to online cultural participation. A high number of the reviewed studies had designed interventions for the purpose of research. In addition to these studies, some aimed to assess pre-existing cultural projects or voluntary participation in culture.

A variety of approaches was presented by the studies. There were initiatives where the cultural experience was designed and delivered by artists or where participants co-created the cultural experience with the artists. Activities such as creative workshops or art classes were facilitated by artists or art educators. In the case of art and creative therapies, the interventions would require employing trained and certified art therapists. Experimental contexts also involved medical staff, psychotherapists and social workers engaging with creative methodologies or collaborating with artists. Projects involving arts in public space and urban design were led by designers, artists and architects.

Partnerships between sectors were of the utmost importance. Specifically, attention was paid to partnerships between the arts and the health, social welfare, urban development and academic sectors. The success of activities in terms of effectiveness, community adherence and sustainability (e.g. the possibility for scaling up pilot interventions) largely depends on factors such as resources, policies and champions in the community.

The designs of the interventions need to be adapted in accordance to the expected outcomes, especially in the case of activities aimed at physical and mental health. Therefore, a good understanding of the needs and social conditions of the target group was needed.

Almost all art programmes aiming to benefit health involved a targeted cultural intervention design. This entailed that expert knowledge rooted both in arts and health was necessary in order to create effective interventions. An advantage of art interventions targeting health and well-being was that they are often well-received. In the case of interventions in healthcare contexts, people seem open to practices that may brighten their medical experiences (e.g., hospitalised children, children undertaking medical tests and people with chronic conditions having to spend significant amounts of time undergoing medical treatment), and may also lighten the caretakers' burden.

The studied interventions involved various population samples from all continents, with sizes varying from one individual (Shik, 2013), and 3–8 individuals (Vaiouli et al., 2015; Slattery et al., 2020) up to more than 50,000 people (Cuyper et al., 2012). Target groups included mothers and infants, pre-school children, children, adolescents and youth, adults and elderly individuals, students of all ages in learning contexts, working adults, disadvantaged population segments, people with disabilities and people with various health conditions.

Considerations related to equitable and inclusive access to culture, social support and healthcare needed to be taken into account. Barriers to enrolment and engagement included the lack of a safe and healthy household appropriate for health-promotion activities, pre-existing health conditions, the financial cost of travelling to and from activities, the lack of resources for art-related materials and inequalities related to access and literacy in using technology.

Among the reviewed studies, more than two-thirds involved multiple participation occasions. Programmes taking place in a healthcare context included a minimum of six sessions, and, most frequently, 10–12 weekly sessions.

Most of the projects took place in a group situation (e.g., theatre-based activities, dance, group singing and group workshops), while others referred to individual cultural experiences (e.g., drawing, painting, digital arts or art therapy) and others combined individual with group cultural engagement opportunities (e.g., art classes followed by individual practice).

The content and quality of artistic programmes was highly relevant, both in the cases where voluntary engagement with the art was encouraged and when specific interventions were created to support social and health outcomes. In both cases, the process of artmaking and engagement with the arts played an important role. When designing the format and content of interventions, a need to involve participants in this process was observed.

## Gaps and limitations

Our scoping review sought to provide an overview of the existing evidence on the effects of cultural participation on people's health and well-being. One thing to bear in mind when reading the report is that, in most cases, the benefits described imply associations rather than causal relationships. Also, given the heterogeneity of the studies in terms of types of interventions analysed, methodological approach and rigour, as well as sample size, reported outcomes cannot be generalised. Although the majority of the articles have been peer reviewed, this is not true for all the included studies. Anyone with an interest in design activities or research projects is encouraged to use the report as a base for orientation and read the original studies for specific and accurate information.

There are gaps we could identify in the reviewed literature. We have identified a limited number of studies that assessed impacts at community level, paying attention to group dynamics, the ecosystem of the interventions and governance aspects. Moreover, there were only a few studies that used longitudinal measures or large population samples. The collective dimensions of interventions tend to be acknowledged for their capacity to 'enhance' or 'facilitate' individual well-being. This might be, on one hand, because studies tend to prioritise focus on the measurable impact that art has on individual well-being. Which in turn could be explained both by a current utilitarian predisposition to view community well-being as a reflection of the cumulative well-being of individual members, and, by the fact that measuring individual experiences is more empirically accessible (through instruments like interviews, questionnaires, surveys, direct observation). On the other hand, this may also be rooted in our general limited vocabulary to comprehensively describe notions of well-being that go beyond the individual.

There were only a few studies that analysed the conditions for sustainability and scaling-up of arts-based activities for health and well-being, which could provide useful insights for professionals and organisations willing to take up on this potential. Also, considerations related to the costs of the interventions, both in terms of financial resources and the intensity of the labour involved for the cultural, social and health professionals delivering them are yet outside of the focus of most research initiatives. A critical analysis of the systemic causes of various health and social crises that social and cultural organisations respond to in the absence of coherent health and social cohesion policies may bring value to this field of research and action.

Also, the review includes studies that assess both art-based interventions and different types of art therapy, which play, in practice, different roles and require different conditions. We have found limited research on the effects of digital cultural participation, an area that is expected to significantly grow with the acceleration of digitisation brought along by the COVID-19 pandemic.

Considering the state of the art in arts and health and well-being research, Fraser et al. (2015) signalled a need for research programmes (instead of single studies) to enable the development and application of conceptual frameworks. It is worth noting that in recent years more comprehensive research studies and theoretical models have been developed, e.g. Warran et al.'s (2022) INNATE Framework for the design, implementation and assessment of arts in health

Many studies do not seek to investigate negative outcomes, which can also result from engaging with the arts. For example, in some cases, during singing activities some participants experienced physical discomfort (an irritated throat), reduced self-confidence in relation with their singing ability, negative mood changes because of the frustration with the type of song chosen, fatigue from the length of the session or the difficulty to remember lyrics due to memory decline (Abell et al., 2017). Interventions that involve complex frameworks (e.g. the presence of artists and researchers in a healthcare environment) may confuse participants (Bolmsjö et al., 2014). Sharing experiences can sometimes make people feel more vulnerable and anxious (Flicker et al., 2020), and have the potential to harm existing relationships.

Our scoping review included a vast and diverse literature, approaching the subject, not only from a health perspective, but also from the perspective of the various dimensions of subjective and community well-being. The review also contains studies published after 2019, adding new evidence to the conclusions of previous landmark studies, such as the WHO Report (Fancourt & Finn, 2019). Furthermore, it has a dedicated chapter presenting and analysing existing research on the role that cultural participation played in people's lives during the COVID-19 pandemic. The fact that our review studies the type of cultural participation and more frequently used forms of art can be considered added value. Our study also sought to throw light onto particular factors that influence the impact level of cultural interventions for health and well-being.

The scoping review has a number of limitations: it only searched through two databases (Scopus and PubMed), and it exclusively considered literature available in English. This may have resulted in the exclusion of other relevant articles. Given the fact that health and well-being are very broad concepts, which are defined in different ways by various sources, our search terms may have covered all the possible valuable aspects of our focus theme not very accurately. As already mentioned in the methodology section, given the broad research questions that have been formulated through the guidelines of the framework programme supporting the CultureForHealth initiative, and the large number of studies, a scoping review methodology has been chosen. Thus, the implementation of a method for assessing the methodological quality of the studies and a detailed and rigorous framework of analysis of the evidence, specific to systematic reviews, would have been impossible in our given conditions. However, the 310 records included in this report offer an important overview of the current research in the field of culture and health.

# **POLICY CONSIDERATIONS**

## The Findings of the Data Extraction: What Works and What Could Work Better

Our original goal with this section was to compare the findings of the data extraction with existing policies. However, the literature search resulted in a very small number of results establishing explicit links between culture, health, well-being and policy.

Nevertheless, despite the absence of a broad range of academic literature dedicated to this topic, the scoping review found evidence that is relevant from a policymaking perspective. Specifically, evidence of relevance to considering how cultural activities can strengthen the links between citizens, existing health support and services, and health policymaking, and hence addressing the question:

### (c) Which policies in the field of culture might contribute, directly or indirectly, to maximising the benefits of cultural activities in improving the health and well-being of citizens?

The answer to this question will be organised into three parts:

1. **Actors in the culture, health and well-being space**
2. **Policy approaches linking culture, health and well-being – or what works**
3. **Key lessons learned – or what doesn't work yet**

Before advancing, and for the sake of clarity, it is important to define the main terms of this section:

- **Culture** is understood as combining:
  - a) the cultural and creative sectors as defined by the European Commission in the regulations of Creative Europe (European Commission, 2018c);
  - b) the cultural practices of non-cultural professionals that support goals such as inter-cultural dialogue and heritage protection, as understood in the Strategy for International Cultural Relations (European Commission, 2016);
  - c) and other cultural practices led by amateurs.
 This inclusive, all-encompassing definition reflects the limitations placed by the EU treaties regarding its competence in culture. That is, if the Union is to 'carry out actions to support, coordinate or supplement the actions of the Member States' (TFEU, Article 6; European Union, 2007b), the former must recognise the diversity of understandings of culture across the Union. The policies suggested in this section are compatible with these definitions, whether more or less specific.
- **Health**, as identified in the preamble to WHO's Constitution, is defined as 'a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity' (WHO, 1947), going beyond a medical approach. Surprisingly, the Constitution does not mention culture;
- **Well-being** is the subject of lively debates and, hence, a term on which there is no international consensus. For the purposes of this section, it is understood as a positive state allowing citizens to participate fully in society. This follows WHO's 1986 Ottawa Charter for Health Promotion, which sees health as 'a resource for everyday life, not the object of living' and as 'a means to an end which can be expressed in functional terms as a resource which permits people to lead an individually, socially and economically productive life' (WHO, 1986);
- **Culture for health and well-being** is understood as an emerging interdisciplinary field supporting the inclusion of cultural practices in treatment and prevention toolkits, built upon:
  - 1) the evidence accumulated by bottom-up actors and researchers of the multidimensional contribution of culture towards health and well-being;
  - 2) and the recognition by policymakers of the sector's potential long-term contribution to the transition towards a well-being economy.

Thus, **the policy recommendations support an expanded and holistic understanding of the value of culture by EU policymakers; that is, one that also reflects its contribution to the well-being of citizens and communities, strengthening the resilience of the Union from a bottom-up approach.**

The inclusion of culture in existing health toolkits is particularly important after the pandemic, which brought to the fore the persistence of health inequities across the EU. In this context, the field of culture for health and well-being identifies new possibilities to provide access to health and well-being, in the framework of both treatment and prevention, to citizens across all social groups. Simultaneously, it provides new opportunities for artists and cultural workers to develop their work in new contexts, expanding audiences and supporting the sector.

## Actors in the Culture, Health and Well-being Space

Table 7. Scoping Review: Key Actors in the Culture, Health and Well-being Space.

Scoping Review: Key Actors in the Culture, Health and Well-being Space
1. An Emerging Community of Practice
2. Beneficiaries
3. The Role of Political-Administrative Authorities

This subsection analyses the results of the scoping review and the main factors determining the effectiveness of interventions with a policy lens. That is, this subsection does not aim to identify specific contexts or people, to use the terminology of the INNATE framework (Warran et al., 2022). That is developed in detail in the previous chapter. Rather, this subsection looks in a more general way at the findings, to identify the main relations between the different stakeholders that compose the emerging policy field of culture for health and well-being.

### 1. Culture for Health and Well-being: An Emerging Community of Practice

The evidence uncovered in the scoping review suggests that maximising the potential of culture for health and well-being requires recognising and engaging with the (often not yet fully codified) knowledge held by an emerging and multidisciplinary community of practice (Wenger, 1998). This can be defined as a domain of formal and informal knowledge exchange, as well as community-building comprised of individuals with shared support for a specific practice.

To be clear, extending the concept of community of practice to this field does not deny the fact that the culture and the health sectors (as well as other sectors involved in this field of practice) are connected to specific disciplines, and that they have hierarchies, histories and languages of their own. Rather, **communities of practice refer to groups of individuals that 'share a concern or a passion for something they do and learn how to do [...] better as they interact'** (Wenger, 2009). That is, the members of this emerging community of practice are not expected to abandon their disciplinary affiliations. Instead, alongside their professional (or other) positions, this concept highlights their shared identity – in this case, members are united by the common goal of increasing awareness of the positive health benefits of culture.

From the cultural side, interventions with positive impacts might be delivered by not only **artists** – e.g., van Dijk et al., (2012), which discusses the results of a theatre intervention for people with dementia living in nursing homes offered by professional actors –, but also **cultural managers, museum educators, curators and other workers, community groups** (e.g., Camic, 2008), **cultural organisations** (including art venues, public space during festivals and museums), **art educators and amateur practitioners** (e.g., Reagon et al., 2016) interested in this topic. At the European level, this could be potentially extended to cultural networks and platforms. In other words, a wide range of contexts, people and projects (Warran et al., 2022) is associated with successful interventions.

That said, the scoping review reveals **the importance of the quality of artistic and cultural engagement** in enabling health and well-being benefits, and thus **the specificities of cultural activities** in this context (see Chapter Factors influencing the effectiveness of interventions, Section B. Project, subsection Artistic Content). In this context, it is also important to protect **the mental health and well-being of actors involved** in the implementation of cultural activities in the sensitive environment of healthcare. This is described in the 'first, do no harm' principle (Jensen, 2014), and



echoed by the European Care Strategy's statement that 'providing care has major consequences for informal carers, including negative effects [...] on their mental health' (European Commission, 2022a).

From the health and social side, the evidence supports a **community of care approach, which is broader than** (but compatible with) **the traditional paradigm of medicalised care**, and which focuses on medical and paramedical staff, pharmacists, etc. Specifically, the importance of **community centres and social workers** is recognised by several papers – e.g., Cordero Ramos & Muñoz Bellerin (2019), which considers art interventions with marginalised groups combining social work and theatre. Moreover, research confirms the increasing importance of the **cultural community development model**, which focuses on the long-term benefits of creative community-building – e.g., Basting (2018) on the integration of people with dementia, or Nelson (2010) on its implementation in public schools. Likewise, cultural interventions can also contribute to **better integrating other stakeholders in health management strategies, such as carers** – e.g. Goodley & Runswick-Cole (2011) on the use of theatre to foster the integration of children with disabilities, which also fostered the participation of carers.

Further confirming the emerging links between culture and health actors, research also highlights the potential of arts and culture to provide information regarding **local community support or health services** (Ta Park et al., 2020) or, more simply, regarding disease control and prevention – e.g. Ghosh et al. (2006) on malaria.

## 2. Beneficiaries

The evidence suggests that **all citizens might gain health and well-being benefits from cultural activities**, both on an individual level (as active or receptive participants) or when taking into account the social benefits derived from resilient communities, for example (see section Agenda Setting, point 3. Supporting Welfare and Prosperity). All citizens are, thus, the **end beneficiaries** of these programmes.

The scoping review also highlights the need to develop cultural health interventions **adapted to specific groups**. For example, one study revealed that Latin dancing can be more successful at engaging elderly Latinos in programs supporting cognitive health (Marquez et al., 2017). This suggested that **policy frameworks connecting culture and health and well-being must be flexible enough to accommodate not only the specificities of cultural practice (requiring space for experimentation, both formal and otherwise) but also, when relevant, individuals' needs and their cultural particularities or preferences**. For more details, see Chapter Factors influencing the effectiveness of interventions, sections B. People and C. Project, subsections Determinants of success or failure. On this topic, research also stresses the positive benefits of cultural community events designed to support refugees, immigrants and asylum seekers (e.g., Philipp et al., 2015).

## 3. The role of political-administrative authorities

Finally, findings suggest that **political-administrative authorities** can take on different roles to strengthen the culture for health and well-being space: they can support or facilitate programmes led by professional cultural workers, amateur practitioners and other actors engaged in a community of care model, as discussed above. For example, research highlighted the benefits of designing public spaces based on an understanding of citizen preferences, supporting social participation and positive emotions (Alyari, 2018), and the positive value of art and environmental design in mental health care units (Daykin et al., 2008a).

Although the scoping review uncovered evidence of several experiments and projects made possible by the explicit or implicit support of local politico-administrative authorities (such as those mentioned above), the culture for health and well-being space can only be reinforced and its full benefits unleashed across the Union **if authorities take on the role of enablers of bottom-up experimentation and network building and, simultaneously, in the case of the EU, provide top-down strategic guidance and other forms of support**.



## Policy Approaches Linking Culture, Health and Well-being or What Works

Having recognised the role of cultural, social and health stakeholders and political-administrative authorities, and the differences and overlaps between target or patient groups and end beneficiaries, it is necessary to understand what the scoping review uncovered regarding the main links between culture, health and well-being.

Table 8. *The Main Links between Culture, Health and Well-being.*

<b>The Main Links between Culture, Health and Well-being</b>
<b>1. Health promotion, disease prevention, management and treatment</b>
<b>2. Active (health) citizenship</b>

### 1. A more holistic approach to health and well-being: prevention, promotion, management and treatment

As the scoping review details, there is substantial evidence that arts and cultural activities can support prevention, management and treatment of disease. This section will not repeat this evidence, which is detailed and analysed in the previous pages of this report (for details, see sub-chapter 1 Culture and Health and the first heading in Table 3. Categories of Outcomes, in chapter Discussion).

Moreover, from a policymaking point of view, it is important to highlight that cultural activities can also contribute to removing social and cultural barriers that impede such disease prevention and treatment. This is clear when one considers evidence regarding the results of participatory theatre intervention in terms of reducing LGBTQI+ stigma in Swaziland and Lesotho (Logie et al., 2019).

Additionally, cultural activities can support not only disease prevention, management and treatment but also the promotion of health and well-being, shifting the focus away from specific illnesses or the lack thereof to a more holistic understanding of health – e.g., Rodgers & Furcron (2016) on the impact of a youth dance program in reducing high-risk behaviour in young people and support participants' competence in important life skills, or Cordero Ramos & Muñoz Bellerin (2019) regarding the impact of theatre in social work, particularly for the recovery of fragmented identities among people facing social exclusion. In the most extreme cases, such interventions can help individuals leave the "misery circle" of illness, social isolation and worsened illness (see Irons et al., 2020a).

More specifically, evidence suggests that cultural interventions can support both individual and community well-being. In Bungay & Vella-Burrows (2013), individual well-being is highlighted by the benefits of creative activities on young people in physical terms and in their overall feeling of well-being; in Cantu & Fleuriet (2018), on the benefits of art classes on both the health of the brain of older adults and their self-reported well-being; in Yuen et al. (2011), on the benefits of participation in community-based theatre activities for elderly adults with chronic conditions both in terms of psychological well-being and health related quality of life; and in Visser & Op 't Hoog (2008), on the benefits of creative art to oncology patients, who reported namely improved overall quality of life and a quest for meaning of life. Community well-being is highlighted in Eleni & Georgios (2020), on the impact of a community dance program for preschool and primary school students in their social relations as well as collaborative and communication skills; in Pearce & Lillyman (2015), on the self-reported increase in self-esteem of elderly participants in creative arts projects and especially when collaborating with a different generation, pointing to the intergenerational potential of these programmes; or in Philipp et al. (2015), on the potential of community festivals to support community cohesion and social capital. For more details, see the second and third headings in Table 3.

### 2. Culture for active (health) citizenship

Finally, the review suggests that cultural participation can support the engagement of patients in their own health strategies and active citizenship. Indeed, some research highlights that cultural activities can be opportunities to stimulate conversations around different medical options – e.g., the case of theatre performance, which can stimulate engagement with the complexities of prenatal screening, as per Hundt et al. (2011). It can also strengthen the

relations between citizens and health policymaking – e.g. in the case of complex topics such as predictive genetic testing (Nisker et al., 2006), which highlights the potential of culture to engage diverse groups of citizens on the one hand, and inform them of diverse policy options and trade-offs before eliciting public opinion on the other.

More broadly, research also highlights the role of cultural interventions in unleashing the potential of citizens to become health change agents – e.g. Kamo et al. (2008), on the impact of community drama made by young people aged between 10 to 14 years in East Africa focused on HIV prevention, treatment and testing knowledge; or Swe et al. (2020), on the use of forum theatre to increase public engagement and raise awareness around antibiotic use in Myanmar. The development of illness-friendly communities is also possible – e.g., Kontos et al. (2021), on the benefits that dance can have for people living with dementia and their families.

This suggests that cultural engagement can support a multidirectional approach to health policymaking (Hundt et al., 2011); that is, combining both top-down and bottom-up elements and, thus, being more inclusive and closer to citizens' concerns.

To give another example, community-centred practices such as traditional storytelling can enhance Community-Based Participatory Research (CBPR), raising awareness of the social determinants of health<sup>5</sup> while also taking into account community concerns – e.g. Gray et al. (2010), regarding the potential of art-based CBPR in reducing health disparities among Native Americans. This said, as with any other policy interventions, to avoid further reinforcing health inequities, the recruitment of participants in such cultural projects should dedicate resources towards ensuring diversity among participants and engaging socially isolated individuals (Davidson et al., 2014).

---

<sup>5</sup> For clarity, the WHO identifies the Social Determinants of Health as 'the non-medical factors that influence health outcomes. They are the conditions in which people are born, grow, work, live and age, and the wider set of forces and systems shaping the conditions of daily life. These forces and systems include economic policies and systems, development agendas, social norms, social policies and political systems' (WHO, n.d.).

## Key Lessons Learned: Challenges or What Could Work Better

To conclude, there are two main lessons that can be taken from the scoping review: firstly, there are several untapped overlaps between culture and health action and policies; secondly, it is necessary to overcome the rather piecemeal and haphazard state of this emerging field, and to create systematic opportunities for collaboration, research, education and training. Only then can the cultural sector fulfil its potential in terms of addressing the many challenges faced by the European Union (identified later in this report).

Table 9. Key Lessons Learned: Challenges.

Key Lessons Learned: Challenges
1. Culture and Health Action and Policies: a Multitude of Untapped Overlaps
2. Further Opportunities for Research, Education and Training, and Collaboration

### 1. Culture and Health Policies: a Multitude of Untapped Overlaps

Cultural activities can be incorporated into health policy in multiple ways: as part of **routine medical care** (e.g. Forouzan-deh et al., 2020), as a form of **auxiliary treatment** (Qin, 2020), supporting **preventive action** – e.g., group music therapy sessions prevent loneliness among cancer patients (Daykin et al., 2007) – or in the context of broader policies supporting **well-being** (e.g., Liddle et al., 2012). They can be incorporated in **care scenarios** (Pérez-Sáez et al., 2020), **individualised** to accommodate to citizen preferences, **integrated in community group practices** or offered as **optional** or even extracurricular **activities** (e.g. Daykin et al., 2008b).

More broadly, cultural practices can support the development of a regained sense of dignity by people facing exclusion – e.g., Cordero Ramos and Muñoz Bellerin (2019) on the impact of theatre in social work with people facing social exclusion – and supporting individuals' ability to manage their **health, thus reinforcing health agency**; that is, 'individuals' ability to achieve health goals they value and act as agents of their own health' (Ruger, 2010).

Finally, supporting this overlap could contribute to **reinforcing the cultural field**, giving new opportunities to the sector as a whole – by encouraging capacity-building activities, new sources of income and funding and, more broadly, by creating an environment that is supportive of experimentation – and also to artists and cultural operators to expand their skills and fields of work. This would reinforce the fragile cultural ecosystem and continue to add to the ongoing expansion of artistic and cultural practices towards cross-sectorial cooperation.

### 2. Despite the accumulated evidence, there is a need for further opportunities for research, education and training, and collaboration

Despite the accumulated evidence summarised above, if the field of culture for health and well-being is to fully unleash its potential benefits across the Union, there are several needs that should be addressed.

Firstly, as the chapter Discussion makes clear, the existing evidence varies in terms of the quality of the evidence base, generalisability and potential impact. This leads to a variety of **research needs**. That said, there is broadly a need for more ex-ante and ex-post research focused on several types of health interventions. **Addressing this need would contribute to overcoming the current ad-hoc approach, which reinforces unequal access to cultural interventions** for health and well-being and, therefore, health inequities. This is evident, for example, regarding singing classes in the United Kingdom for lung disease, which are currently either dependent on charitable support or self-funded by participants (Lewis et al., 2016).

Secondly, there is a clear need for **education and training**. This would allow, for example, clinical staff to improve the application of cultural activities (Qin, 2020), to increase support towards specific groups – e.g., individualising cultural activities to support people with dementia (Hammar et al., 2011), to find new ways to understand the patient experience (potentially improving care practices (Laing et al. 2017), and **to increase knowledge of the effects of such interventions**, maximising the benefits of their use – e.g., nursing staff (Blumenfeld & Eisenfeld, 2006).

This would also **impact the cultural sector**: in terms of awareness (by putting culture as a driver for change, but also

allowing cultural operators to be more aware of the potentiality of their intervention), skills (by opening opportunities for those in the sector to improve and expand their ways of working with new stimuli and knowledge), and in terms of the status of artists and cultural workers (that is, by contributing to clarify the many roles that they can play in the society).

More broadly, such education and training can **contribute to overcoming barriers and other biases** that result from the lack of knowledge by health stakeholders of the health and well-being benefits of cultural interventions – e.g., Jones et al. (2017), on the contribution of experiences with artworks to the personal development of medical staff, as well as their increased awareness of art as an important health tool – ; and research by Warmth et al. (2020) on the impact of theatre, using narratives from discriminated Black women to support healthcare providers' understanding of inequity-.

Thirdly, although positive impacts are more likely when there is a **structured collaboration** between medical care and cultural facilitators with clear protocols (Goldenberg, 2018; Yuen et al., 2011), there is a need to overcome the ad-hoc basis of such partnerships. More details regarding the design of these interventions are provided below.

All in all, the scoping review foregrounds the richness of **the cultural sector as an untapped resource with the potential to support the health and well-being of its citizens in multiple ways**. Given this fact, there is a clear rationale for the European Union to recognise and take advantage of this potential.

## Policy Recommendations - or What Can Be Done?

Based on the key ideas that emerged from the data extraction, this section makes several recommendations, both broad and specific, to unleash the benefits of culture for health and well-being in the European Union. A more targeted version of these recommendations will be delivered at the end of the project, taking into account the lessons of the bottom-up pilots developed in the context of the CultureforHealth project.

Whereas the previous section only referred to the literature uncovered in the scoping review, this section combines such findings with the lessons gained from policies and initiatives led at the EU, national, regional and local levels, which were collated during the mapping of Programmes, Initiatives and Projects on Culture for Well-being and Health (also implemented in the context of the CultureforHealth project).

### The Competences of the EU in the Fields of Culture and Health

Before making such recommendations, however, it is important to place them within the legal framework of the EU.

The competencies of the EU in the fields of culture and health are limited. In both cases, direct intervention or EU-initiated reforms are not possible. This is made clear by Article 6 of the Treaty on the Functioning of the EU (European Union (2007) – which comes into force in 2009 – which states that the Union does not have exclusive or shared competence regarding areas such as the 'protection and improvement of human health' and culture. Rather, the EU can only 'support, coordinate or supplement the actions of the Member States' regarding both policy fields. That is, the EU is allowed to develop legally binding acts in these fields; however, they cannot require national harmonisation of laws or regulations. That said, the Union may also develop non-legislative activities (for more, see Culture Action Europe & Dâmaso, 2021).

However, regarding the cultural field, Article 167(2) TFEU does identify within the scope of action of the EU the development of action aimed at 'encouraging cooperation between Member States' (European Union, 2007b). As for the field of health, Article 168(1) TFEU states explicitly that 'Union action, which shall complement national policies, shall be directed towards improving public health, preventing physical and mental illness and diseases and obviating sources of danger to physical and mental health. Such action shall cover the fight against the major health scourges, by promoting research into their causes, their transmission and their prevention (European Union, 2007b).' To do so, as Article 168(2) TFEU explains, the Union can 'encourage cooperation between the Member States' and 'lend support to their action' (European Union, 2007b).

Although Member States are to coordinate their action among themselves in liaison with the Commission, the latter can 'take any useful initiative to promote such coordination, in particular initiatives aiming at the establishment of guidelines and indicators, the organisation of exchange of best practice, and the preparation of the necessary elements for periodic monitoring and evaluation (Article 168(2) TFEU, European Union, 2007b).' This does not deny the ability (or the responsibility) of Member States to set their own health policies, organise the delivery of care, and allocate resources in this regard (Article 168(7) TFEU, European Union, 2007b).

In other words, **the Treaties allow the Commission to support research and exchange examples of best practice leading to the establishment of guidelines and indicators (Article 168(2) TFEU, European Union, 2007b) to monitor and assess the results of treatment and prevention (Article 168(1) TFEU, European Union, 2007b).** This can be combined with the legal possibility to develop action that supports and supplements the cultural action of Member States regarding non-commercial cultural exchanges (Article 167(2) TFEU, European Union, 2007b). Therefore, even if the EU's competencies in both policy fields are limited, **the Treaties make possible a set of actions to maximise the potential impact of culture in supporting individual and community health and well-being.**

The recommendations included in this section also expand to other policy fields. For the sake of clarity, regarding education policy, the Union may encourage cooperation between Member States, as well as supporting and supplementing their action (Article 165 TFEU, European Union, 2007b). As for social policy, the Union 'may take initiatives to ensure coordination of Member States' social policies,' (Article 4 TFEU, European Union, 2007b). Finally, regarding cohesion policy, the Union 'shall develop and pursue its actions leading to the strengthening of its economic, social and territorial cohesion' (Article 174 TFEU, European Union, 2007b).

## Agenda Setting: Key Policy Principles or What Goals Should Guide These Policies?

The section Findings of the Data Extraction identified a set of promising points. According to the evidence, cultural interventions can:

1. support health prevention and treatment;
2. underpin a more holistic approach to health focused on well-being;
3. strengthen active (health) citizenship.

However, the section also highlighted two main challenges:

1. the untapped overlaps between culture and health action and policies
2. the need for further opportunities for research, education and training, and collaboration. In the context of these potentials and challenges, the questions to which this section and the following respond are:

*(c) Which policies in the field of culture might contribute, directly or indirectly, to maximising the benefits?*

*(d) What synergies are necessary with other policy fields?*

Before making specific recommendations, it is important to identify **the broad principles or goals framing such policies**, which we detail below: those supporting the recognition by policymakers of the potential of culture to contribute to health treatment and prevention; those supporting the links between culture, health and well-being as an emerging interdisciplinary field of knowledge and practice; and those maximising the potential of culture to promote an economy of well-being.

Table 10. Key Policy Goals.

Key Policy Goals
1. Awareness
2. Interdisciplinarity
3. Support Welfare and Prosperity

### 1. Awareness

At a time when health and mental health are political priorities across both the Member States (Bauer-Babef, 2022) and the Commission, it is important to ask whether the review found evidence<sup>6</sup> that the benefits of culture have been used to produce strong results and maximise the impact of investment in this regard.

Unfortunately, the results of the scoping review are clear: **there is a significant gap between, on the one hand, the wide range of studies demonstrating that culture can have an impact on health and well-being, both in individual terms and at the community level, and, on the other hand, the limited studies demonstrating that policymaking reflects this evidence.**

Since cultural policy can be defined as 'what governments choose to do or not to do in relation to culture' (Bell and Oakley, 2015), this finding is relevant in itself. The generalised inaction by policymakers identified by the scoping review is parallel to (and may be explained by) the absence of systematic evidence regarding the links between these policy fields until only very recently. Indeed, as noted before, the Ottawa Charter for Health Promotion (World Health Organization, 1986) did not include cultural participation as an enabler of good health.

<sup>6</sup> The authors of the present report recognise the tension between the hierarchies of evidence that are central to the medical sciences on the one hand, and the much broader understanding of evidence that underpins the arts and humanities on the other. This explains why the recommendations made later in this chapter include a systematic examination and mapping of such overlaps and differences.

In other words, to translate this finding into the language of 1) actors, 2) resources and 3) policy content, cultural and health actors (in the form of both practitioners and academics) have been gradually developing the culture for health and well-being space with minimal or virtually non-existent support from political-administrative authorities. This has allowed them to gather evidence regarding a set of enablers and barriers supporting or hindering the benefits of cultural intervention on health and well-being (see Discussion). Currently, the existing policies reflecting this work and evidence are minimal.

However, some progress has been made, as demonstrated by the 2021 Geneva Charter on Health Promotion for Well-being for All (WHO, 2021), which acknowledges the important role of cultural elements for health and well-being promotion when it refers to the need to ensure 'that people and communities are enabled to take control of their health and lead fulfilling lives with a sense of meaning and purpose, in harmony with nature, through education, culturally relevant health literacy, meaningful empowerment and engagement (WHO, 2021).' Moreover, the Charter argues that ensuring that 'everyone [who] enjoys a long, healthy life and lives well' requires transitioning 'to more sustainable, equitable societies and to learn from [...] cultures – especially indigenous cultures – how to create more sustainable, equitable societies' (WHO, 2021).

As for the few published policies in the fields of culture for health and well-being in Europe, one must begin by stressing the extremely limited number of documents found on this topic. Within the EU, and at the time of writing, the main exception is Finland (discussed in detail by Laitinen et al., 2020). Activities connecting art and health emerged in the beginning of the 1990s, and 'the first government-level cross-ministerial programme promoting health and well-being through art and culture began in 2010', leading to the establishment of cooperation practices between Ministry of Education and Culture, the Ministry of Social Affairs and Health, the Ministry of Employment and the Economy and the Ministry of the Environment (Laitinen et al., 2020). Finnish municipalities also recognise the role of art and culture, as evident in the fact that, 'according to the evaluation of basic public services in 2017, more than 70 per cent of municipalities had included art and culture in their welfare report (Laitinen et al., 2020).' Although the article discusses the roles given to the arts and health field and those given to cultural institutions at different levels (national, regional and municipal), it also stresses that 'the publicly funded cultural institutions have not yet used their full potential to take part in developing and implementing arts and health activities (Laitinen et al., 2020).'

Crucially, there are emerging links between this field and education and training institutions, and an increasing number of research projects across Finnish institutions such as the National Institute for Health and Welfare (ECDC) and Center for Cultural Policy Research Cupore, as well as universities of applied sciences. However, and again, 'despite the rather lively research activity, arts and health as a research field is not yet established in Finland (Laitinen et al., 2020).' In any case, it should be noted that Finland not only officially acknowledges and supports the links between culture and health and well-being, but also institutionalises this support with a strategy that links the Ministries of Education and Culture, and Social Affairs and Health (Ministry of Education and Culture of Finland, 2016). In practical terms, this model is translated into shared employees, national networks, cultural profiling in care planning and cultural instructors – e.g., musicians, arts and culture graduates and other individuals hired by social welfare and healthcare services to support elderly people (Cutler et al. 2021).

Also of note is a symposium organised by the WHO on the arts and health in the Nordic region. The symposium report (WHO, 2019b) focuses on the Skåne and Nordic regions of Sweden. It is worth quoting this document at length. It states that:

*'In Region Skåne, integrating arts and health into policy has been particularly successful. In 2014, the regional parliament approved an overall strategy for culture and health with a focus on children, elderly people and people with mental ill health. In practice, this has resulted in the implementation of several promising interventions [...] including: arts in hospitals (engaging patients with the world of art through dialogue and co-creation with artists); hospital clowns (stimulating patients with a focus on humour and fantasy); and culture on prescription (a type of social prescribing that enables health-care practitioners to refer people to arts and creative activity programmes) (WHO, 2019b).'*

However, several main policy challenges are indicated in this report, namely: meeting the evaluation standards used in health care, 'a lack of national arts and health strategies; the inconsistent application of systematic evaluation approaches; and a need for more cross-sectoral working and political support (WHO, 2019b).'

More recently, the Swedish Skåne region published its own Arts and Health strategy for the period 2022-2030 (Utveckling Skåne, 2022). The document was developed jointly by the health and culture sectors, and was built on principles such as broad sector-wide cooperation and the development of sustainable structures financed by the region.



Finally, promising early evidence regarding the positive impact of culture-based **social prescribing**<sup>7</sup> (What Works Wellbeing, 2020) justifies the increasing number of pilot projects and policies that encourage its use. Examples can be found in Belgium, England and Ireland, although the use of different models to structure the delivery of these activities must be acknowledged. For example, in Ireland, GPs and other frontline healthcare professionals can refer patients to a social prescribing coordinator (White & Salamon, 2010) – the equivalent to what is known as a “link worker” in England (NHS, 2020) – while a pilot project in Brussels allowed doctors to directly prescribe museum visits to support the mental health of their patients (Fota, 2022).

Social prescribing reflects ‘a new relationship between people, professionals, and the health and care system’ (NHS, 2020). This being said, each context in which social prescribing is embedded may organise this relationship in different ways. In England, for example, the component ‘social prescribing and community-based support’ is defined as one of six interlinked components, which also include: shared decision making; personalised care and support planning; enabling choice, including legal rights to choice; supported self-management; and personal health budgets and integrated personal budget (NHS, 2020).

These limited examples reiterate the fact that **the recognition of health and well-being as a political priority across the Union, the accumulated scientific evidence of the benefits of culture in this regard and international discussions regarding health promotion are yet to meet in a systematic manner.** Therefore, the first goal or principle that underlies the recommendations made in the following sections is:

*Increasing the awareness by political-administrative authorities in different fields (primarily culture and public health but also others, such as education) at all levels (EU, national, regional and local) of the potential of culture to support, as the evidence demonstrates, individual and community health and well-being.*

This argumentation is supported by further evidence, which demonstrates that there are Return Investments to be had in long-term investment in public health interventions (Masters et al., 2017). Indeed, despite their limits, the existing data provides sufficient evidence to support action by policymakers. This is why increasing the awareness of such authorities is a policy priority or goal. This said, it is important to be explicit about the **rejection of an instrumentalisation of culture** in this context and, more specifically, of well-being data (Oman, 2021). Although the scoping review demonstrates that cultural projects can have health and well-being benefits, the evidence also shows that this is only due to the cultural logic and value of such interventions. Seeing culture simply as a means to achieve benefits in a domain that is external to it (in this case, health and well-being) would likely decrease its impact. This would be a counter-productive strategy and, in a more practical sense, a false economy. Rather, the idea is that the health and well-being benefits of actively participating in a cultural activity, for example, are inseparable from the cultural particularities of such a context of engagement. To unleash and maximise the benefits of cultural action, it is necessary to support it as such – and not simply as an enabler of something else.

## 2. Interdisciplinarity

Additionally, policymakers reading this report may occasionally experience cultural elements as obstacles to – rather than enablers of – change in their work. For example, the implementation of measures such as the Nutriscore, an essential part of the EU Green Deal (European Commission, 2019a) with the Farm to Fork strategy (European Commission, 2020d), has been slowed down by the argument that policies to limit unhealthy foods can stigmatise local and national products, understood as part of cultural heritage and identity.

The scoping review and the policy documents surveyed so far suggest that culture can indeed be used to promote health, but only if its actors (professional and others) are given the conditions and the space to do what they know best: cultural creation and experimentation. Without adequate funding, training and governance structures, the potential health and well-being benefits of such work cannot be unleashed. Thus, the second goal or principle that underlies the recommendations made in the following sections is:

*Seeing culture, health and well-being as an emergent interdisciplinary field of knowledge and practice requiring adequate funding, training and governance.*

<sup>7</sup> The World Health Organization defines social prescribing as ‘a means of connecting patients to a range of non-clinical services in the community to improve their health and well-being. It builds on the evidence that addressing social determinants of health such as socioeconomic status, social inclusion, housing, and education is key to improving health outcomes (WHO, 2022b).’



That is, there is a **need to disseminate existing knowledge and to support the education or training of health specialists, cultural workers and other relevant stakeholders** (e.g., social workers and relevant individuals in community health contexts). Indeed, 'the development of the culture–well-being link brings with it an increased demand of specialists and professionals that may operate in designing, promoting, implementing and monitoring such activities, calling for new professional profiles that sit at the boundaries between culture, psychology, medicine, and nursing (European Commission, 2020g).'

On the one hand, consequent training requires **the support of cultural actors by sharing evidence regarding what works and how**. This could be developed in connection to calls for up- and re-skilling the current EU Skills Agenda (European Commission, n.d.). On the other hand, regarding **health actors**, there should be an updating of the skills of the workforce, as discussed under the EU Pact for Skills (European Commission, 2020c), as well as forecasting and planning for the skills of the future generations of health professionals. In this direction, the European Commission's Communication on a European Skills Agenda for sustainable competitiveness, social fairness and resilience (European Commission, 2020b) details a number of key areas for action, including strategic national upskilling, fostering transversal and skills for life. Furthermore, as included in the opinions by the EC Expert Panel on Effective Ways of Investing in Health (EXPH), there is a need to invest in 'capacity and ability to determine relevant knowledge and good practices as related to vulnerable groups by [...] appropriately adapting them into the [...] local culture (European Commission, 2020b).' The panel also stated that 'workforce capacity needs to be developed to ensure health promotion practitioners are equipped with the required competencies to implement current knowledge, research and best practice in health promotion (European Commission, 2019a).' Addressing these calls and needs requires **ring-fencing research funding and supporting dedicated education and training opportunities for health specialists, cultural workers and other relevant stakeholders** (e.g., health, urban design, education and social service providers) at local, national and European levels.

However, a piecemeal approach to this topic is unlikely to be sufficient to maximise the full benefits of culture for health and well-being across the European continent. Rather, the links between these disciplines have the potential to result in a new interdisciplinary field of knowledge and practice, whose emergence **reflects broader and parallel shifts in discussions regarding health and culture**. The former is increasingly recognised as significantly wider than the treatment of disease, while the latter is increasingly understood as more than a professional sector of activity whose main contribution to society is the advancement of the history of art. An explicit engagement with health promotion and prevention reinforces the broader role of culture in society, and empowers it to take a crucial role in promoting just, equal and sustainable societies, supporting the Agenda 2030 (UN General Assembly, 2015). In common, these emerging disciplinary changes place health and culture as policy fields that also include within their scope **strengthening capabilities<sup>8</sup>, thus supporting individual and community flourishing**.

Indeed, as the review demonstrated, culture has the potential to support not only health and well-being but also an **informed citizenry** that is actively engaged with policymaking. Moreover, 'the literature finds a strong association between cultural participation and trust, dialogue, empathy, political and civic engagement and related dimensions of a cohesive democratic society (European Commission, 2020, citing namely Campagna et al., 2020; and Jeannotte, 2017).' Therefore, the relevance of 'cultural access goes much beyond entertainment, and concerns basic dimensions of individual and public health, social connectedness, and resilience (European Commission, 2020g).'

**However, unleashing this potential requires not only strategic, top-down support that maximises the potential benefits of existing resources but also provides a space for citizens to participate in decision-making**, increasing public support for these collaborations. **Hence, the governance of these collaborations requires a permanent negotiation between top-down and bottom-up elements**. In doing so, the awareness of the benefits of cultural participation for health and well-being could support the emergence of a broad 'consensus basis for a rethinking of the role of culture in European societies' (European Commission, 2020g).

<sup>8</sup> Although this discussion goes beyond the scope of this report, capability refers here to Sen's and Nussbaum's capability approaches (1992 and 2011, respectively), which focus on 'what the person is free to do and achieve in pursuit of whatever goals or values he or she regards as important' (Ruger, 2010). For a discussion of this term applied to health, see Ruger 2010; for a discussion of the approach applied to cultural policy, see Nærlund, et al. (2020) and Wilson et al. (2017).

### 3. Supporting Welfare and Prosperity

Some policymakers may be wary of investing in cultural interventions for health and well-being due to existing constraints on available budgets, particularly in the post-COVID-19 context. Is it financially savvy, they may ask, to support yet another set of cultural activities? The question is seemingly obvious, but it may be based on flawed assumptions.

Firstly, **supporting culture for health and well-being programmes does not necessarily require designing funding and other instruments from scratch.** Rather, the first important decision that can be made by policymakers in this context is to support cultural actors so that they can do their work with an added recognition of the health and well-being benefits of such work or practices. Ideally, this will be followed by dedicated programmes. However, as is demonstrated later in this chapter, cultural interventions can also be embedded in existing programmes and instruments.

Secondly, **the current focus on disease treatment rather than health prevention is a false economy.** Data from Eurostat makes this point clear. In 2019, while some EU members dedicated more than 10 per cent of GDP to health-care expenditure (e.g. Germany and France spent 11.7 per cent and 11.1 per cent, respectively) (Eurostat, 2019), “preventive health care in the EU accounted for around 0.3 per cent of GDP in 2019” (Eurostat, 2022b). **If cultural interventions can be preventive of disease and support individual and community well-being** (as the scoping review demonstrated), **they are likely to contribute to long-term health budget savings.** Thus, evidence supports the embedding of “cultural policies and projects into an integrative approach to welfare (...), addressing some of the most pressing trade-offs of today’s European welfare systems, such as the trade-off between quality of care and allocation of resources” (European Commission, 2020g). This is why the third goal or principle that underlies the recommendations made in the following sections is:

*Maximising the potential of culture to support welfare and prosperity by promoting an economy of well-being.*

This potential provides a strong rationale to overcome the mismatch between the evidence on health promotion and current patterns of healthcare expenditure – indeed, only three per cent of health budgets are spent on prevention, even though non-communicable diseases account for up to 80 per cent of healthcare costs (Health Inequalities, n.d.1). Rather, **it makes sense to invest in activities that contribute to health promotion in the long-term, guided by a holistic approach** that complements the biomedical model. Culture, for reasons such as its adaptability to diverse audiences with specific needs (from the young to the old, but also individuals in working age) supports this approach. As the WHO stated, **‘the arts provide cost-effective interventions for complex health challenges that may not have current health-care solutions,** while alleviating pressures on limited health resources (WHO, 2019b).’

**Doing so requires addressing existing health inequalities;** that is, ‘differences in health status occurring among individuals or groups or, more formally, the total inter-individual variation in health for a population, which often considers differences in socioeconomic status or other demographic characteristics’ (WHO, 2015), and therefore supporting health equity, that is, ‘the absence of systematic disparities in health (or in the major social determinants of health) between groups with different levels of underlying social advantage/disadvantage – that is, wealth, power, or prestige’ (Braveman & Gruskin, 2003). In turn, addressing these differences requires paying attention to the social determinants of health (SDH); that is, ‘the non-medical factors that influence health outcomes. They are the conditions in which people are born, grow, work, live, and age, and the wider set of forces and systems shaping the conditions of daily life’ (WHO, n.d.). Thus, contrary to common belief, the SDH can influence health more than healthcare or lifestyle choices.

In other words, ‘health and illness follow a social gradient: the lower the socioeconomic position, the worse the health [...] It is estimated that 80-85 per cent of what is important in tackling health inequalities sits outside the control of health systems (Health Inequalities, n.d.2).’ That is, **supporting health and well-being for all requires addressing the underlying causes of health inequality, and, thus, broader forms of inequality.** The culture for health and well-being approach could be embedded within initiatives such as EU4Health, which paves the way for a European Health Union (European Union, 2021), following the results of projects such as the Joint Action Health Equity Europe (JAHEE, n.d.), and embedded in other priorities, such as the European Pillar of Social Rights (whose principle 16 addresses health, alongside other principles that cover the SDH) (European Union, 2017).

However, **the welfare benefits of the links between culture, health and well-being can be seen in an even more ambitious and long-term manner.** Rather than merely comparing costs of health prevention programmes (namely cultural) against those of health treatment, the former could also be seen **as a long-term investment in individual and community prosperity.** This logic echoes the vision of EuroHealthNet (2022a) and supports what the OECD (2019) and the Finnish Presidency of the Council of the European Union in 2019 named as the Economy of Well-being; that is, the ‘capacity to create a virtuous circle in which citizens’ well-being drives economic **prosperity,** stability and resilience, and vice-versa, that those good macroeconomic outcomes allow to sustain well-being investments

over time (OECD, 2019).<sup>1</sup> Indeed, in the Economy of Well-being model, public and private investments in the determinants of health – which could include cultural interventions – supports a healthy and sustainable workforce, and hence economic resilience, based on a restorative approach to the economy EuroHealthNet (2022a). In other words, in this approach there are **'multiple pathways through which the health sector co-creates societal gains across other sectors, both directly and indirectly'** (EuroHealthNet, 2022a).<sup>2</sup> This holistic and multi-pathway approach echoes the United Nations 2030 Agenda. Particularly relevant in this context are the Sustainable Development Goals number 3 (good health and well-being) and number 11 (sustainable cities and communities), which can be understood as supporting self-reinforcing loops (Dawes, 2019).

**Thus, the culture for health and well-being space supports current policy debates, that expand the narrative around health and health systems away from a predominantly biomedical approach to health creation and maintenance,** echoing ongoing debates regarding the European Health Union (European Commission, 2020a) and European Parliament's Special Committee on the COVID-19 pandemic (European Parliament, 2022a). Simultaneously, it reiterates what EU citizens want the Union to do for health and well-being, as suggested in proposal 9: a broader understanding of health included in the final recommendations of the Conference on the Future of Europe, which supports a 'holistic approach to health, addressing, beyond diseases and cures, health literacy and prevention' (Conference on the Future of Europe, 2022). More broadly, an economy of well-being could underpin a **society of well-being**, that is, a model of social organisation in which human and planetary well-being are placed at the centre of policymaking, potentially leading to a reorganisation of the latter and to a rethinking of the traditional siloed approach that frames policy development. Although a discussion of this idea goes beyond the scope of this report, it is important to mention that references to it can be increasingly found in research from fields indirectly connected to the culture, health and well-being space, such as leisure and labour studies (e.g., García, 2016; Ferraro et al., 2015).

This approach **connects the space of culture for health and well-being with ongoing discussions and priorities at the level of the EU focused on enabling services and solutions rooted in communities.** For example, the Action Plan for the Implementation of the European Pillar of Social Rights (European Union, 2017) includes several principles directly relevant to the cultural and creative sector and services focused on: the right to equal opportunities, healthcare, long-term care and disability care, and essential services. In the context of the post-pandemic Recovery and Resilience Facility (European Commission, n.d.6), a number of EU and European policy processes could also be supported by strengthened links between the arts and culture, and health and social care sectors. In particular, the European Semester and the implementation of the Recovery and Resilience Facility, via national plans for rebuilding economic, social and health systems offer significant leverage. By demanding that restored and reformed health and social care systems prioritise better health promotion and preventive approaches, and invest in people and communities' assets and skills, the value of arts and culture for health and well-being can be recognised.

Although this approach has benefits for wider society, it can also be targeted at 'socially marginalised or excluded communities, to promote integration and to improve resilience' (European Commission, 2020g), and to address structural inequities. In this context, the European Commission's strategic frameworks for the integration of migrant and refugee populations, such as its Action Plan on Integration and Inclusion 2021-2027 (European Commission 2020), are important references.

## Policy Programme - or What Kind of Impact Can Be Expected and How Can It Best Be Facilitated?

The report’s recommendations are inspired by the three principles presented above. But before making recommendations, it is important to highlight:

- The multiple types of impact that culture can bring to health and well-being;
- The interdisciplinary and multi-levelled approach to policy that is being proposed.

### Activating All Culture-Health-Well-being Impact Pathways

The results of the scoping review, combined with other documents (e.g., policies and the findings of other scoping reviews), suggest that there are multiple and occasionally overlapping pathways linking culture on the one hand and health and well-being on the other. Supporting them simultaneously would maximise culture’s potential in this regard.

For the sake of clarity, the report organises these dimensions of impact into five pathways: two at the individual level (highlighting the fact that cultural engagement can support physical and mental health, as well as subjective well-being), two at the community level (focusing on benefits surrounding social connectedness or belonging, and active, resilient communities), and one at the economic level (supporting a well-being economy).<sup>9</sup> It should also be noted that the impact pathways identified below are interdependent and cut across the different themes that are identified in Chapter Scoping Review Findings. That said, some dimensions of impact are more closely connected to some themes than others (e.g., subjective well-being).

Table 11. Types of Impact and Pathways of Impact

Type of Impact	Impact Pathways
Individual	1. Culture -> physical and mental health 2. Culture -> subjective well-being
Community	3. Culture -> social inclusion 4. Culture -> engaged, resilient communities
Economy	5. Culture -> well-being economy

#### 1. The first pathway focuses on the effect of cultural engagement on physical and mental health.

The benefits included in this pathway cover prevention and promotion, and management and treatment (as is evident in particular in Chapter Scoping Review Findings, Theme 1. Culture and Health). This can also be described as the relation between activities that combine physical movement, psychological and emotional engagement (such as dance) and their impact on ‘the integration of the psychological and physical components of well-being’ (European Commission, 2020g). Due to the strong overlaps between mental health and ‘emotional regulation’, we also include the ability to control fear and anxiety, to manage boredom and to ‘cultivate positive feelings’ (European Commission, 2020g) in this pathway. As a recent WHO report stated, ‘investment in the arts means investment in improving social integration and cohesion, and can contribute to mental well-being for all’. Thus, ‘arts and cultural activities can form an important part of an organized mental health and psychosocial support response (WHO, 2022a).’

<sup>9</sup> This typology combines the categories of outcomes identified in Chapter Scoping Review Findings, with an adaptation of the dimensions identified by Pier Luigi Sacco included in the report summarising the Workshop for the Experts of the EU Member States on Culture for Social Cohesion (European Commission, 2020g). That is, it combines a number of Sacco’s culture–well-being pathways into one (subjective well-being), and proposes a new dimension focused on their broader economic impact.

Studies from the scoping review that illustrated this point include Camic & Chatterjee (2013), which suggested strong positive correlations between cultural activities and health in the general population; Bungay & Vella-Burrows (2013), which highlighted that creative activities promote behaviour change and healthy lifestyles, as well as increased confidence and social skills in adolescents; and Stanhope & Weinstein (2020), which showed that singing bowl therapies lead to improvements in blood pressure, heart rate, respiratory rate and the peripheral capillary oxygen saturation of adults. All of these studies focus on prevention and promotion.

This pathway is also supported by Fancourt et al.'s 2020 literature review, which found strong evidence for the use of the arts to reduce physical decline in older age, the use of book reading to support child social development, and the use of music or reading for speech and language development amongst infants and children (Fancourt et al., 2020), and promising evidence for the use of the arts to support cognition in older age (Fancourt et al., 2020). This pathway is further confirmed by Gardner et al.'s (2021) review of the evidence of arts-based engagement on individuals and communities for the Healthcare Improvement Studies Institute, which concluded that 'a few [individuals] reported on (sic) intention to change behaviour as a consequence of the activity' (Gardner et al., 2021).

Specific recommendations inspired by this dimension of impact could aim namely to link culture for health and well-being with:

- the EU4Health Programme of Work (particularly, with its goal to improve and foster health in the Union by supporting disease prevention and health promotion);
- the WHO European Region processes and their work on Mental Health (for example, through the Pan-European Mental Health Coalition; WHO, 2022c);
- mental health interventions along the life course (an approach supported by WHO/Europe);
- discussions included in the Council Recommendations on the Long-term Care, and the Green Paper on Ageing (e.g., supporting healthy and active ageing; Council of the European Union, 2021b);
- broader EU campaigns, such as the Healthy Lifestyle Campaign (European Commission, 2021d), establishing the circle between nutrition, movement and culture as the basis for holistic well-being.

## 2. The second pathway focuses on the impact of culture on subjective well-being.

Rather, the second dimension of impact focuses on subjective well-being (discussed in depth in Chapter Scoping Review Findings, Theme 2. Culture and Subjective Well-being). For example, 'neuroscience research documents how music listening, thanks to its strong capacity to activate key neural reward circuits, can be considered as one of the most pleasurable human experiences (European Commission, 2020g).' This pathway has 'effects in various directions. For instance, the fact that fiction generates intrinsic rewards adds up to the fact that it can help improve social cognition and pro-sociality (European Commission, 2020g).'

Studies from the scoping review that illustrate this point include Skingley et al. (2016), which demonstrated that participating in community singing can have benefits for health and well-being, and Liddle et al. (2012), which showed that playing musical instruments and painting can lead to improved emotional well-being of women over the age of 80.

This pathway is also supported by a literature review of more than 3,500 studies (Fancourt & Finn, 2019), which focused on the potential of the arts in 'the prevention of ill health, promotion of health, and management and treatment of illness across the lifespan', and found evidence for the use of the arts to improve well-being (that is, positive psychological factors) in adults and promising evidence for the use of the arts to support well-being in children and young people. The contribution to well-being of free time for artistic activities was also highlighted by Hardoon et al.'s (2020) review of the evidence for the What Works Centre for Well-being.

It should be noted that this pathway also includes the links between culture and a sense of purpose. In other words, 'the eudaimonic dimension of well-being, that is, the pursuit of activities that strongly relate to meaningfulness in life. In this regard, participation in community arts has been documented as an especially important driver (European Commission, 2020g).' Studies from the scoping review that illustrate this point include Billington (2019), which showed that reading supports meaning-finding, and Laing et al. (2017), which demonstrated that watching digital stories made by paediatric and adolescent or young adult oncology patients proved effective in supporting healthcare professionals to find purpose in their role.

There is also evidence that participation in creative activities facilitates a sense of meaning in people with cancer (Visser & Op 't Hoog, 2008) and in those suffering from mental illness (Hilse et al., 2007), and supports sense-making in bereaved parents (Bosticco & Thompson, 2005). This is not far from current discussions within the EU. Indeed, one could read the European Commission's decision to offer mindfulness courses and support "forest bathing" for EU officials working on climate change (Booth, 2022) as an example of cultural activities (understood in a broader sense)

that support a sense of ownership and purpose in life.

Specific recommendations inspired by this dimension of impact could focus namely on:

- supporting funding lines and programmes dedicated to arts practices that are participatory and group or community-based;
- supporting research dedicated to better understanding the links between cultural interventions and well-being, and the social determinants that are involved in or may be barriers to these processes;
- supporting culture for health and well-being with funding lines and programmes directed at improving health and well-being at work; e.g., by establishing links between arts and cultural projects and workplaces in the context of the EU OSHA healthy workplaces campaign (which calls for a Psychosocial Occupational Risks and Prevention Directive; see EU OSHA, n.d.)

### **3. The third pathway connects cultural experiences with social inclusion.**

This pathway is important 'in promoting social cohesion goals such as trust-building and mutual recognition among people from different ethno-cultural backgrounds, also as a form of conflict resolution and transformation (European Commission, 2020g).'

Studies from the scoping review that illustrate this point include Abell et al. (2017), which provided evidence of the impact that group singing can have on the social connectedness of people with Parkinson's. Particularly, more evidence illustrating this pathway can be found in Chapter Scoping Review Findings, Theme 3. Culture and Community Well-being, subsection A. Social Inclusion.

This pathway is also supported by Fancourt et al.'s (2020) literature review, which found evidence for the following outcomes, suggesting that it can be trusted to guide policy: the use of the arts to support aspects of social cohesion, and the use of music to support infant social development. Additionally, the same literature review found promising evidence for the following outcome, suggesting that it can be trusted to guide policy in most situations: the use of the arts (other than reading) to support child social development

Specific recommendations inspired by this dimension of impact could focus namely on linking culture for health and well-being with:

- funding lines and programmes directed at supporting social inclusion, young people and young adults, children, minorities, refugees and other groups;
- cohesion and development funding;
- discussions taking place in the context of the New European Bauhaus Initiative (European Commission, 2021a)

### **4. The fourth pathway links cultural engagement with engaged, resilient communities.**

This fourth pathway is evident in particular in Chapter Scoping Review Findings, Theme 3. Culture and Community Well-being, subsections B. School and Work-Related Well-being, C. Local Development, and D. Built Environment and Well-being. This echoes the connection, established by Pier Luigi Sacco (European Commission, 2020g) between vibrant cultural contexts and rich heritage on the one hand, with 'place-specific forms of resilience' on the other. As mentioned before, unleashing this pathway of impact requires paying attention to issues of cultural equity, and thus to 'ensuring that culturally diverse forms of art are available and accessible to a range of different groups across the life-course, especially those from disadvantaged minorities (WHO, 2019).'

Studies from the scoping review that illustrate this point include See et al. (2020), which demonstrates evidence of the impact of theatre on increased public engagement around antibiotic use, and Cueva et al. (2016), which also demonstrates evidence of the impact of visual art, particularly of watching digital stories, on increased knowledge and understanding on cancer.

This pathway is confirmed by Gardner et al.'s (2021) review of the evidence of arts-based engagement. The authors write that 'there are several examples of arts-based approaches empowering individuals within the target community to make decisions, manage their own lives or contribute to their communities. A key feature of these has been members of the target community creating or co-creating artistic outputs for wider engagement (Gardner et al., 2021).'

This review also 'found [...] two examples of activities leading to cultural or community-level impact.'



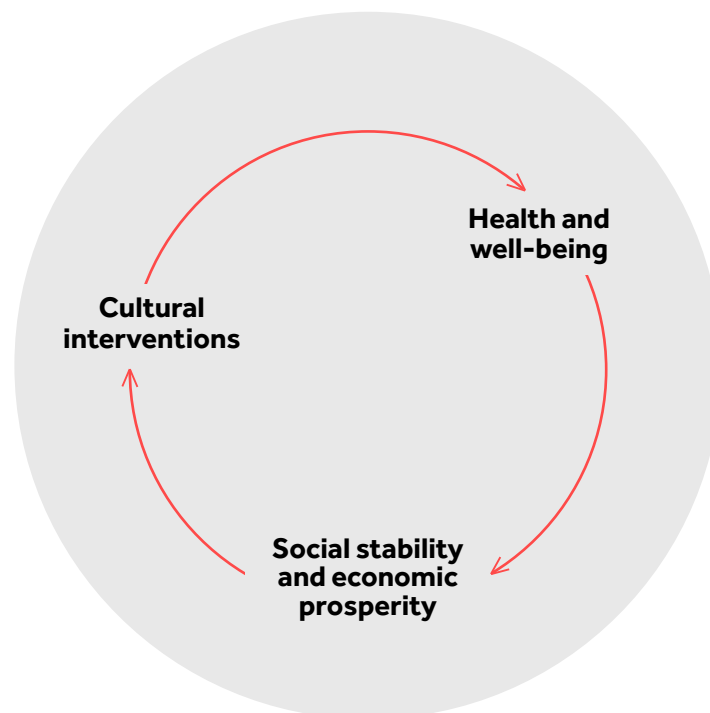
Specific recommendations inspired by this dimension of impact could focus namely on linking culture for health and well-being with:

- EU and national Recovery and Resilience processes, namely but not only targeting groups with complex needs such as refugees;
- cohesion and development policy funding

## 5. The fifth pathway connects culture and health with a well-being economy.

While the causal relation in the previous pathways goes from cultural intervention to individual or social health or well-being, this pathway of impact is circular: cultural interventions support health and well-being, which reinforce social stability and economic prosperity, and thus support continued investments in culture for health and well-being. As the pandemic highlighted, psychosocial risks, and stress in particular, are significantly affecting citizens' physical and mental health. Although the findings summarised in the fourth heading (Culture and COVID-19) in Table 3: Categories of outcomes are to be highlighted in this context, all studies that illustrate the potential of culture to contribute to health and well-being support this pathway.

Figure 4. The circular relation between culture and the well-being economy.

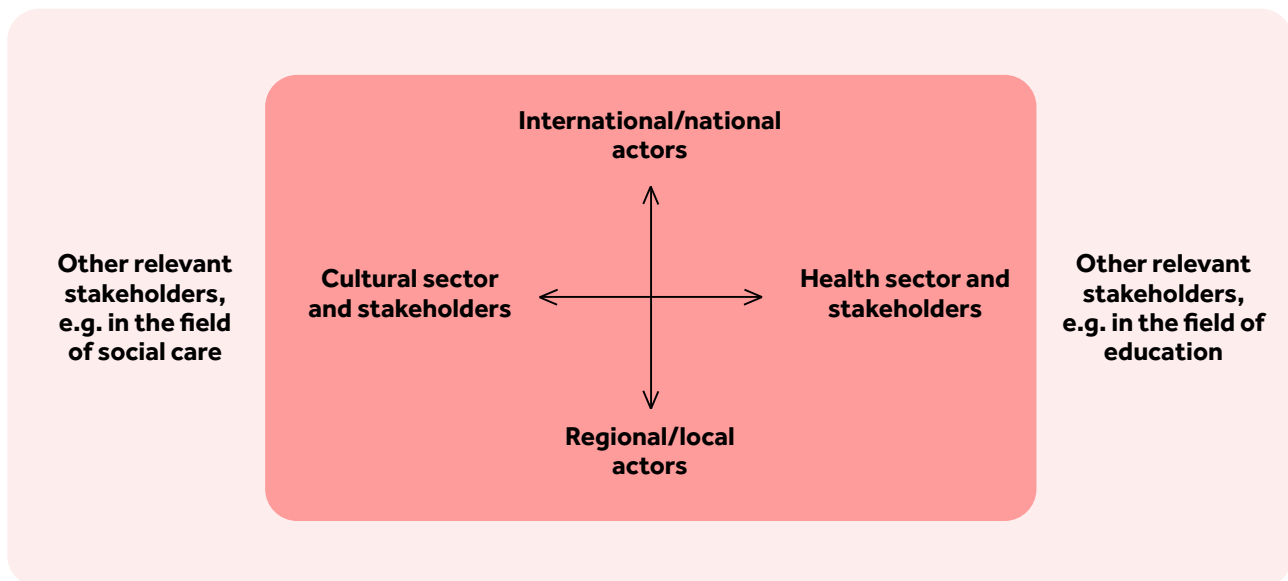


Specific recommendations inspired by this dimension of impact could focus on:

- linking culture for health and well-being with the EU4Health Programme of Work (particularly, with its goal to 4) strengthen health systems, their resilience and resource efficiency);
- establishing links between arts and cultural projects and the Health in All Policies approach as well as work around the European Health Union – particularly its Europe's Beating Cancer plan (European Commission, 2021b);
- more broadly, recognising the contribution of culture and health to the green transition.

## An Interdisciplinary and Multi-Levelled Approach to Policy Action

Figure 5. Culture for Health and Well-being: Levels and Disciplines



**Additionally, maximising the impact of culture on health and well-being requires deploying the potential of multiple policy levels.** Indeed, as the New Agenda (European Commission, 2018a) recognises, national, regional and municipal policymakers are key actors in culture-led development. At the same time, 71 per cent of respondents to the Special Eurobarometer 466 stated that quality of life can improve when citizens live close to places related to Europe's cultural heritage (Data Europa, 2017). Altogether, these two points suggest that local or urban planning activities that recognise the importance of cultural access may maximise health and well-being; they can be supported by European-level policies and programmes. At the European level, the linkages between culture, health and well-being could be connected to the New European Bauhaus (European Commission, n.d.12), the EU Urban Policy Agenda (European Commission, n.d.13) and the European framework for action on cultural heritage (European Commission, 2019c).

Therefore, **urban and local decision-makers, as well as European politico-administrative authorities, emerge as key actors supporting the maximisation of the potential of culture for health and well-being.** As discussed earlier, this multi-levelled approach should also be combined with an interdisciplinary approach fostering opportunities for collaboration between stakeholders from and beyond the policy fields of culture and health.

Figure 5 (above) provides a simple visualisation of these relations, which, it must be noted, are not organised hierarchically. Rather, echoing the community of care model, the **relationship between levels and disciplines should be understood as inherently collaborative, as well as flexible** enough to adapt to different needs, contexts of practice, types of knowledge (not only that of specialists but also, for instance, tacit or social), and ways of working. This reflects the collaborative ownership of these projects, which can be described as **partnership-based, developed across disciplinary boundaries and inserted in iterative processes of continued bottom-up and top-down learning.**

Specific recommendations inspired by this dimension of impact could focus on:

- Supporting a stakeholder mapping focused on the European Union; this could include researchers working in academic disciplines whose theoretical models could contribute to the development of this emerging field (e.g. sociology, philosophy, anthropology);
- Facilitating conversations and knowledge sharing between different stakeholders at multiple levels, without forgetting specific interest groups such as young people;
- Creating or reorienting programmes and funding to support experimentation and scaling-up across local, regional and national levels



## Specific Policies and Targeted Investment Measures

This subsection focuses on the delivery of practical recommendations for policymakers at the EU level, and is inspired by the principles identified in the previous section.<sup>10</sup>

### Culture and health policies

The goal of **maximising the contribution of cultural interventions to individual and social health and well-being** (both as treatment and prevention, and in ways that support equity), **and hence the effectiveness and the resilience of national health systems**, requires concerted action across four areas:

1. **Dedicated strategic and financial support**
2. **Knowledge and awareness building**
3. **Training and peer learning**
4. **Localising culture, health and well-being R&D and policy discussions**

### Dedicated strategic and financial support

1.1 **Include culture as an integral part of the EU's health strategy and as a core pillar of its upcoming mental health strategy.** The approach shall be comprehensive, holistic, focusing on long-term health promotion and disease prevention and shall address health inequalities.

1.2 **Increase investment in prevention and health promotion.** If cultural activities can prevent disease and support individual and community well-being, they are likely to contribute to long-term health-budget savings. Cultural activities are also a **cost-effective** way to support more equal access to health and broader efforts targeting the social determinants of health. They should be based on the combined resources of three different major budgets (health, culture and social care), be consistent with the timeframe required to achieve the potential benefits and ensure fair remuneration of all actors involved.

1.3 **Embed dedicated provisions** that recognise the health and well-being benefits of cultural activities **in policy documents** at the European, national, regional and local level.

1.4 Promote the use of **culture-based social prescribing across the EU.**

Also, and more specifically:

- **Establish funding lines** co-financed by different budgets, such as culture, health, social action and education<sup>11</sup>;
- **Fund research** focused on culture for health and well-being linkage **regarding which there is limited evidence** and, in the case of existing evidence, supporting longitudinal studies, RCTs or similarly robust qualitative methods to better understand the interrelations between individual, community and other variables associated with the successful deployment of culture as an active factor for health and well-being;
- **Fund research examining what constitutes evidence in the arts and health contexts**, including a systematic overview of conceptual and epistemological overlaps and differences, and a map of specific needs and opportunities for **cross-sectoral engagement between the Commission's Directorates-Generals** (such as DG SANTE, DG EAC, DG EMPL);
- **Create dedicated calls and financial support dedicated to research, knowledge transfer, peer-learning and capacity building** in existing EU programmes (see below), without, however, diminishing existing financial support to other cultural programmes and practices;
- **Support pilots evaluating** the encouragement of cultural engagement in this context with **cultural cheques or vouchers.**

<sup>10</sup> As mentioned before, more details regarding these policy recommendations (operational instruments, implementation and evaluative elements) will be included in a subsequent part of the project (task III), which will reflect the lessons taken from the pilots associated with the CultureForHealth project.

<sup>11</sup> As has already been argued by the WHO (2019, 56), based on UNDP's cross-sectoral co-financing approach (UNDP, 2019).

## Knowledge and awareness building

2.1 **Recognise cultural activities as complementary to traditional medical responses** to both ill health and its prevention, the multiple dimensions that connect culture to health and well-being, and, in particular, culture's contribution to the economy of well-being. Strive for equal-level cooperation between the cultural, health and other stakeholders involved in the design and implementation of these activities.

2.2 **Support further research** in the field of culture for health and well-being, with particular emphasis on advancing the knowledge of the impact factors and mechanisms, to enable maximisation of the benefits of culture in this context. Increase the number of large-scale, large sample, cross-country research initiatives. More research is also needed into the health and well-being effects of digital participation in cultural activities.

2.3 **Raise awareness of the evidence** regarding the health and well-being benefits of cultural activities and, more broadly, of the **cost effectiveness** of supporting a more comprehensive, equal and long-term approach to health policy across the EU.

Also, and more specifically,

- Coordinate and **facilitate the development of mechanisms for the exchange of experiences, languages and best practices** between culture and health experts through the allocation of **financial support for a dedicated European network**. Special attention should be given to 'sharing knowledge and practice of arts interventions that countries have found effective [...] to promote health, improve health behaviours or address health inequalities and inequities (WHO 2019, 55);'
- Support further research in the arts for health and well-being space, namely supporting the co-design and development of **cross-country, transdisciplinary, long-term pilots of qualitative and quantitative monitoring criteria as well as KPIs monitoring the impact of culture on health and well-being**, noting their enablers and barriers. Subsequently, if deemed relevant, supporting the embedding of these KPIs in ongoing and future projects in the culture for health and well-being space. Attention should also be paid to 'studies that examine interventions scaled up to larger populations, or studies that explore the feasibility, acceptability and suitability of new arts interventions (WHO 2019, 55).' More broadly, there is a need to **continue to develop knowledge on the linkages between arts activities and improved health and well-being** (see figure 3);
- Related to the previous point, **support further research regarding the potential contribution of culture to health equity;**
- Support **knowledge gathering and experimentation focused on under-examined but policy-relevant topics**, such as the contribution of cultural engagement to **mental health in the workplace**, or emerging topics such as the long-term contribution of **culture for conflict prevention**, transformation, resolution and post-conflict action, **and to support those directly affected by conflicts** (Council of Europe, 2013);<sup>12</sup>
- Support research and pilots to **examine the possibility of developing double culture and well-being indicators and monitoring criteria** – that is, encouraging health organisations to embed cultural activities in their work and, simultaneously, as previously noted by the WHO, 'encouraging arts and cultural organisations to make health and well-being an integral and strategic part of their work' (2019, 56). This could also apply to **broader policy domains and goals, such as the Sustainable Development Goals**. In this context, cultural indicators could be added to the EU SDG indicator set (European Commission, 2019d);
- Support knowledge exchange and pilot projects testing different **culture on prescription** models in view of their potential mainstreaming in the European Union;<sup>13</sup>
- **Foster structured dialogue with civil society organisations** and patient groups to give input to policy action from the Commission in this regard. Ideally, this would take the shape of a **dedicated permanent forum**. Alternatively, it could happen for instance in the context of so-called Voices of Culture or, in the context of DG SANTE, by setting up a specific dedicated annual network as part of its EU Health Policy Platform (European Commission, n.d.2);
- **Develop EU-wide communication campaigns** that promote 'public awareness of the potential benefits of arts engagement for health (WHO 2019, 56)'

<sup>12</sup> This echoes one of the recommendations made in a joint WHO and Culture For Health policy paper focused on the role of culture in supporting the mental health of forcibly displaced people: 'artistic methods and practices can contribute to skill-building among those involved in humanitarian responses. Integrating artistic methods into mental health awareness-raising and other types of training can help to improve active listening, cultural competence and diversity sensitivity. In humanitarian responders, these skills can greatly contribute to community empowerment and participation (WHO 2022a, 4).'

<sup>13</sup> This recommendation joins that of WHO's 2019 report, which suggested 'considering the introduction, or strengthening, of lines of referral from health and social care to arts programmes, for example through the use of social prescribing schemes (WHO 2019, 56).'

## Training and peer learning

3.1 **Develop curricula and encourage joint training, as well as life-long learning** involving culture, social and health stakeholders **on an equal level, in culture for health and well-being** for: a) university students in the cultural, artistic, medical and social areas; b) established practitioners and professionals; and c) capacity building on an institutional level (e.g., in museums, theatres, or health or care centres).

3.2 **Support the development of training** that encompasses mechanisms to **take care of the mental health and well-being of actors involved** in the implementation of cultural activities. In the sensitive environment of healthcare, caregivers, artists, cultural managers and other stakeholders can face challenging situations. **Enable and financially support peer learning and the exchange of good practice guidelines** on the topic across borders and sectors.

More specifically:

- Support, coordinate and encourage **opportunities for exchange and mutual learning on an equal level** of language, values, and ways of working (e.g., principles and technical procedures) between culture, health and other relevant experts and practitioners;
- Support the inclusion of **modules** (combining theoretical and practical elements) **focused on the benefits of art and culture for health and well-being in training and professional development programmes for health professionals such as doctors, nurses, pharmacists (already working as such and students) and other stakeholders** (e.g., as part of broader training or modules focused on the social determinants of health, responses to health inequalities, strategies to deliver community and integrated care and best cross-sector collaboration practices), and, equally, **dedicated health and well-being modules in education, training and professional development programmes for art and culture professionals and workers**. This could be developed in connection to the EU Skills Agenda (European Commission, 2020f) and the EU Pact for Skills (European Commission, 2020c).
- Promote **targeted knowledge dissemination and training to support the skillset and the capacity of artists and cultural workers to deliver cultural projects** with health and well-being benefits, particularly when working with specific groups (e.g., the elderly, retired people, young people, individuals with special needs);
- Promote **targeted knowledge dissemination among policymakers to support the widespread inclusion of culture-based social prescribing** within the toolkit of General Practitioners, local health agencies and other health stakeholders.

## Localising culture, health and well-being R&D and policy discussions

4.1 Support the **creation of a dedicated platform** enabling policy discussions and exchange of knowledge on culture, health, and well-being. In the short-term, this platform could be driven by EU Member States (for example, in the context of the Work Plan for Culture 2023-2026) or, alternatively, by a think tank or a university. In the mid-term, it could be **embedded in an already existing EU-level health organisation, agency, or other structure**. In the long-term, the interdisciplinarity of the culture, health and well-being fields would justify the creation of an independent organisation dedicated to advancing the field through R&D, cross-border peer learning, training, capacity building and policy recommendations, which could take the form of a **Centre for European Culture, Health and Well-being**.

4.2 **Encourage Member States, regions, cities and organisations** to establish **their own culture for health and well-being strategies, and to assign dedicated finance and personnel** to the promotion of integrated culture and health policies and interventions. Embed these actions in the work of local health, cultural and social institutions. Such strategies should recognise that change takes time, and thus prioritise the goal of their long-term impact.

Additionally:

- Recognise, disseminate and promote best practices by **supporting the creation of a European Year for Culture, Health and Well-being; a European Culture, Health and Well-being Award; and/or an Annual Festival of Culture for Health and Well-being**. To enable knowledge and best practice exchange, the latter could be hosted, for example, by ECOC cities.

<sup>14</sup> This is echoed by the European Care Strategy's statement that 'providing care has major consequences for informal carers, including negative effects [...] on their mental health (European Commission, 2022).'

## Synergies with other policy fields

Maximising the multidimensional impact of culture on health and well-being also requires **establishing synergies with existing policies, programmes and actions in other policy fields, supporting a holistic approach to health.** This echoes the WHO's 2019 report, which recommended noting 'the cross-sectoral nature of the arts and health field' (WHO 2019, 56). As suggested earlier, this goal could be implemented through integrating collaboration in the culture and health domains in actions aimed at supporting:

- European strategic priorities and tools such as the **European Green Deal** (European Commission, 2019a), **the European Pillar of Social Rights and its Implementation Action Plan** (European Union, 2017), **the Urban Agenda for the EU** (European Commission, 2021f);
- European values such as **internal cohesion, and education policies and labour markets responsive to economic, social and environmental change.**

## Targeted Investment Measures

The following Targeted Investment Measures would support the policies identified in the previous section.

### 1. Maximising the multidimensional impact of culture on health and well-being requires guaranteeing that art and cultural programmes are embedded in existing programmes and actions, such as:

- **EU4Health**, particularly supporting its disease prevention action (European Commission, n.d.5);
- the **Recovery and Resilience Facility**, e.g. following up the implementation of cross-sectoral policy solutions in national recovery and resilience plans to make Member States' economies and societies more resilient (European Commission, n.d.4) and beyond them;
- the **European Care Strategy** (European Commission, 2022a) and broader discussions included in the Green Paper on Ageing (European Commission, 2021c);
- **the NCDs Healthier Together Initiative**, particularly in the strand focused on health determinants, mental health and CVDs (European Commission, 2022b);
- **the Europe's Beating Cancer Plan** (especially in its prevention aspects, European Commission 2021a);
- **EU campaigns** such as the Healthy Lifestyle Campaign or the OSHA healthy workplaces campaign;
- programmes and action that continue the goals of the **European framework for action on cultural heritage** (2019-2020), especially pillar 1 (cultural heritage for an inclusive Europe: participation and access for all) and pillar 2 (cultural heritage for a sustainable Europe: smart solutions for a cohesion and sustainable future), namely **the New European Bauhaus** and its goal of regeneration of urban or rural spaces;
- and by guaranteeing that the **outcomes and impact** of these programmes are measured and evaluated properly, that is, in the long-term and with a wide range of methodologies (quantitative and qualitative).

### 2. Maximising the multidimensional impact of culture on health and well-being also requires creating dedicated programmes, funding opportunities and actions in other policy fields.

This goal could be implemented through **new investment measures** such as:

- creating dedicated strands of financial support to projects measuring impacts, collecting data and evidence, establishing and keeping up mechanisms to implement cross-sectoral collaborations between culture, health and **research and education** in existing EU programmes and actions such as:
  - The **European Skills Agenda** (e.g., by embedding culture and health collaborative work as one of the commitments guiding Action 1: A Pact for Skills – see European Commission, n. d.9. and European Commission, 2020c);
  - **Erasmus+** (e.g., by embedding arts/culture and health collaboration within its Key Action 2: cooperation among organisations and institutions; and 3: support to policy development and cooperation; European Commission, 2021e);

- **Horizon Europe** (e.g., by creating a dedicated funding opportunity focused on the impact of art and culture on health and well-being, either in cluster 1: 'Health', supporting health throughout the life course and/or health care systems, or in cluster 2: 'Culture, Creativity and Inclusive Society', focusing on the role of culture to support social and economic transformations, European Commission, n.d.3)
  - supporting measuring impacts, collecting data and evidence, establishing and keeping up mechanisms to implement cross-sectoral collaborations between culture, health and **social policy** in existing EU programmes and actions such as:
- **European Social Fund Plus** (ESF+), supporting its work focused on the social integration of people at risk of poverty and social exclusion, for instance by including arts and culture organisations within the remit of the future European Competence Centre for Social Innovation;
- the EU's **strategic frameworks for addressing child poverty and social exclusion** (e.g., supporting the aspects of the EU Child Guarantee related to healthcare, leisure and cultural inclusion);
- creating dedicated strands of financial support to projects supporting measuring impacts, collecting data and evidence, establishing and keeping up mechanisms to implement cross-sectoral collaborations between culture, health and **regional cohesion policy** in existing EU programmes and actions; **INTEREG 2021-2027** – in particular, supporting its work on a more social Europe, bringing Europe closer to citizens and better regional governance.
  - supporting measuring impacts, collecting data and evidence, establishing and keeping up mechanisms to implement cross-sectoral collaborations between culture, health and regional **development policy** in existing EU programmes and actions such as:
- **European Regional Development Fund** (ERDF) 2021-2027 to improve regional art, culture and health infrastructure, particularly by supporting its work to achieve Policy Objective 4: a more social and inclusive Europe implementing the European Pillar of Social Rights and Policy Objective 5: a Europe closer to citizens by fostering the sustainable and integrated development of all types of territories and local initiatives.

# Culture, Health and Well-being: Addressing European Challenges

As mentioned in the introduction, this scoping review is important in light of several present and emerging challenges faced by Europe. Although this report was not structured around those challenges, this section proposes a different reading of the scoping review findings. In doing so, it establishes new links between existing needs and pathways for future action.

## 1. The need for an increased focus on health promotion and prevention

The importance of health promotion and prevention across the human lifespan is well known. However, in the EU, **public and private expenditure on preventive care accounted for only 2.8 per cent of total health expenditure in 2018** on average, with the highest shares recorded in Italy (4.4 per cent) and Finland (4.0 per cent) (Eurostat, 2021). The tension between existing knowledge on the one hand, and investment patterns on the other, becomes stronger when one considers the existence of research suggesting that focusing on health promotion and prevention is a highly cost-effective investment (UK Health and Security Agency, 2016). Additionally, taking into account the social determinants of health, focusing on health promotion and prevention could also potentially pre-empt the reinforcement of health inequalities – see the challenge entitled **'The association between ill health and patterns of inequality'** for more.

This challenge could be addressed by recognising the health benefits of culture and thus increasing the spending on mixed-methods approaches, such as activities with potential benefits in terms of prevention and health promotion, based on the combined efforts of health, culture, social care and other budgets. In this context, one could also consider using arts and culture for health communication and increased public engagement during the development of health policies.

### Case stories:

Positive associations between participation in both receptive and creative cultural activities and good health have been found (Cuyper et al., 2012; Hansen et al., 2015; Ekholm et al., 2016).

There is evidence associating viewing a visual artwork with stress reduction and systolic blood pressure reduction (Law et al., 2021), and the aesthetic experience related to visiting a cultural heritage site with stress reduction (cortisol levels) and an increase in well-being (Grossi et al., 2018). Group singing was found useful in improving respiratory and cardiovascular function, cognitive function and psychological well-being (Hagemann, 2021), reading groups in improving mood and mental states (Billington, 2019) and dance activities in improving mood, reducing depression and anxiety symptoms, relieving pain and enhancing physical functioning (Baltà Portolés, 2021, Cruz-Ferreira et al., 2015, Brustio et al., 2018, Kim & Lee, 2016).

Some studies suggest that attending theatre performances with health-related subjects may increase awareness and understanding of various health conditions (Burns et al., 2018; Ghosh et al., 2006).



## 2. A growing mental health crisis

The mental health crisis, exacerbated by the COVID-19 pandemic, is one of the main challenges facing policymakers today, as has been recently recognised by the European Parliament (2022b). This issue is **particularly present in 15-24-year-olds**, among whom mental health issues have doubled in the last two years. Indeed, several longitudinal studies of adolescents in the USA, the Netherlands and Peru detected an increase in depressive symptoms during the pandemic (Barendse et al., 2021). Around the world, suicide is the 'fifth most prevalent cause of death for adolescent boys and girls aged 10–19; for adolescents 15–19, it is the fourth most common cause of death, after road injury, tuberculosis and interpersonal violence. (UNICEF, 2021).'

Additionally, cases of depression, loneliness and stress among the child population have risen dramatically. To give some examples, in Croatia there were 57.1 per cent more suicides in 2020 in the 15–25 age group, 70 per cent of all suicides in Bulgaria occur in youth, and self-harm and suicide attempts by Italian teenagers increased by 30 per cent between the autumn of 2020 and spring 2021 (Taylor, 2022). The mental health crisis is exacerbated by a series of indirect and direct reasons (such as the pandemic, climate anxiety, war, economic and energy crises).

That said, the COVID-19 pandemic – as a physical health crisis with impact on the mental health of the population, which is often described as a second but silent pandemic – only reinforced a pre-existing crisis. As a European Parliament brief puts it, 'according to the Health at a Glance: Europe 2018 report, **one in six people across EU countries – about 84 million individuals – had a mental health issue in 2016**', well before the pandemic (EPRS, 2021).

Thus, a focus on 'action that minimises risk factors and maximises protective factors in key areas of children's and adolescents' lives, especially the family and school' (UNICEF, 2021) is not only highly important in the post-Covid context, but also likely to remain topical in the future. **The challenge lies in making the shift towards a more preventive approach to mental health issues among young people. Culture can support this paradigmatic change.**

As is stated in a recent article on the notion of preventive psychiatry for young people, 'universal public health approaches targeting school climate or social determinants (demographic, economic, neighbourhood, environmental, social and cultural) of mental disorders hold the greatest potential for reducing the risk profile of the population as a whole (Fusar-Poli, 2021).' This is echoed in the European Parliament's statement that 'any EU mental health strategy aimed at children and young people must first and foremost provide them with opportunities to be heard [...] a successful strategy must involve [...] cultural institutions.' Therefore, 'a holistic understanding of health [...] includes overall physical, mental and social well-being, and requires comprehensive prevention and healing strategies, including cultural and sporting activities, and promoting the development of creative and social skills (European Parliament, 2022b).'

**More broadly, the workload and drain caused by the pandemic** on health professionals and beyond has led to an increase in levels of **anxiety and depression** (EPRS, 2021). A survey conducted in Europe in 2021 (Statista, 2022) shows that 66 per cent of respondents in Poland, 59 per cent in Czechia and 45 per cent in France experienced or were close to work-related burnout (classified by the WHO as a syndrome resulting from ill-managed chronic workplace stress), while a study conducted in Spain during the pandemic found that the burnout syndrome among healthcare professionals ranked at 43.4 per cent (Torrente et al., 2021). Moreover, as the 2021 World Happiness Report noted, there was also a noticeable association not only between the pandemic and the rise in mental ill health, but also an increase of inequalities within the population and between social groups in this regard (World Happiness Report, 2021).

Finally, culture is also increasingly recognised as supporting the **social reinsertion** of individuals who faced a period of homelessness (Cordero Ramos & Muñoz Bellerin, 2019), ill health (Reynolds et al., 2008; Fenech, 2009), prison (Kela-her et al., 2014) or other difficult situations (e.g., **adolescents in a court-referred residential treatment**, Bittman et al., 2009 and **men with disabilities in community rehabilitation**, Fulton et al., 2016). This requires establishing structured links between the culture, health and social care systems.

**All in all, there is an urgent need to address the mental health of the population and in particular of the most vulnerable social groups.** However, the supply side frequently lags behind demand due to funding and staffing issues. Linking culture and arts with health interventions (for example, as part of primary health care delivery) offers potential gains, while also saving national, regional and local budgets and social expenditure in the long-term. According to OECD estimates (OECD, 2018), in 2015, mental health disorders cost Europe over €600 billion (around 4 per cent of GDP). Specifically, depression and anxiety alone have an estimated cost to the global economy of US\$ 1 trillion per year in lost productivity (WHO, 2016a). Indeed, **integrated public health solutions have been found to have a high Return on Investment (ROI) ratio** (1 to 14 on average, 1 to 27 for nation-wide interventions – see Masters et al., 2017).

As the scoping review highlighted, culture can increase awareness of mental health challenges and offer contexts for people to manage them via cultural participation before and during, instead of after other forms of management and treatment. Unleashing this potential would require limited (if any) changes to the programming of cultural organisations. That said, deploying large-scale strategies such as cultural social prescription could further reinforce the contribution of the sector in terms of mental health promotion and mental illness prevention. **Particularly, studies organised according to category 1. Culture and Health** (Prevention of ill health and Management and Treatment of Mental Health Conditions) and **2. Culture and Subjective Well-Being** (further organised into the following categories: A. Personal Fulfilment and Engagement; B. Personal Orientation; C. Experiences of Emotions; D. Personal Evaluations of Life) provide ideas that may inspire action aimed at addressing this challenge in the future.

This challenge could be addressed by funding cultural activities with potential benefits in this context by supporting cross-sector partnerships to widen access to these activities, and enabling further research in the field of culture for mental health and well-being. While doing so, it is important to develop mechanisms to take care of the mental health and well-being of actors involved in the implementation of cultural activities in this context.

### Case stories:

Results showed that participation in receptive and creative cultural activities was associated with good health, good satisfaction with life, low anxiety and depression scores (Cuypers et al., 2012).

Reagon et al. (2016) found that group singing can lead to beneficial effects on mood, depression, anxiety and health related quality of life in people living with a chronic health condition. Furthermore, Williams et al. (2018) showed that group singing can bring enjoyment, improved emotional states, sense of belonging, self-confidence, improved mental health and well-being with moderate and large effect sizes.

Wulff et al. (2021a) found that singing-based early postpartum interventions led to improved maternal emotional state and mother-infant bonding.

Coulton et al. (2015) found that older people's participation in group singing activities can have an effect on their mental health-related quality of life and anxiety and depression levels. Dunphy et al. (2019) further presented evidence that such benefits were the result of improved physical, intra-personal, cultural, cognitive and social factors.

Active engagement with a variety of creative activities benefited individuals with mental health problems through emotion regulation strategies (Dingle et al., 2017; Fancourt & Ali, 2019), increased experience of positive emotions (Dingle et al., 2017; Jensen, 2019), well-being (Leckey, 2011), improved self-acceptance (Slattery et al., 2020) and a sense of empowerment (Buchan, 2020).



### 3. The need to support the broader health and well-being of young people

Alongside their mental health, supporting the broader health and well-being of young people is another important challenge facing European policymakers. In a 2012 report, the WHO identified the social determinants of health and well-being among young people. The report notes that young people 'face many pressures and challenges, including growing academic expectations, changing social relationships with family and peers and the physical and emotional changes associated with maturation. These years mark a period of increased autonomy in which independent decision-making that may influence their health and health-related behaviour develops. **Behaviours established during this transition period can continue into adulthood** (WHO, 2016c).' That is, supporting the health of young Europeans at such a crucial moment of their lives can also be seen as an investment in the future health and well-being of the citizens and inhabitants of the European Union.

**Particularly, studies organised according to category 3. Culture and Community Well-Being, subcategory B. School and Work-Related Well-Being** provide ideas that may inspire action aimed at addressing this challenge in the future.

This challenge could be addressed by promoting cultural activities tailored to this specific age group and making them available through cultural, educational, social and health setting, ensuring access to youth from underprivileged communities. The use of culture-based social prescribing could also help to address it. More broadly, as with several other challenges, supporting the health and well-being of young people would be facilitated by the recognition that cultural activities are complementary to traditional medical responses for both ill health and its prevention.

#### Case stories:

A cross-sectional study showed that participation of adolescents in cultural activities is associated with better reported health, life-satisfaction, and self-esteem, with a higher frequency of participation being associated with better-reported outcomes (Hansen et al., 2015). Creative engagement in adolescents was also found to be associated with mental well-being and resilience (Efstathopoulou & Bungay, 2021) and promotion of healthy lifestyles, such as engaging in physical activity and reduction of risk behaviours (Bungay & Vella-Burrows, 2013).

Mak & Fancourt (2020) found that daily reading for pleasure in childhood was associated with better behavioural adjustment in early adolescence.

Active engagement in art therapies and creative activities can support management of emotions, group interactions and confidence in the case of primary-school children (Moula, 2021) and early age children (Gao et al., 2021).

Young people engaged in photography activities may experience a reduced feeling of social isolation and marginalisation (Charles & Felton, 2020).

Pellicciari et al. (2013) found that theatre activities supported patient care and quality of life in hospitalised young patients with eating disorders.

The development of creative skills could support personal and professional development, as well as the ability to navigate life in the case of children with communication difficulties (Barnes, 2014) and youth (Rodgers & Furcron, 2016).

## 4. Ongoing changes to labour markets, patterns of work and the economy

A further challenge that is currently faced by the European Union regards the **ongoing changes to labour markets, patterns of work and the economy**. These changes predated COVID-19 but were also exacerbated in many ways by the pandemic. Among other issues, a discussion paper by the McKinsey Global Institute on the future of work in Europe (Smit et al., 2020) suggested that the future impact of automation on occupational categories is likely to be differentiated, and that this is likely to 'accelerate the concentration of potential net job growth' (2020). This may be accompanied by increased diversity and flexibility of working patterns and organisational preferences. Simultaneously, the transition to the green economy will require profound changes, not only by carbon-intensive economic sectors but also, more broadly, towards different patterns of consumption and ways of living. To face this challenge, it is important to **strengthen critical thinking and the capability to deal with complex challenges in a transversal way**.

**Schools have an important role to play in this context by providing widespread access to artistic education and cultural activities.** Interestingly, the McKinsey Global report states that the future concentration of jobs is likely to take place in places with 'highly educated workforces with a strong representation of STEM skills' (Smit et al., 2020), among other characteristics (with STEM referring to science, technology, engineering and maths). The report's lack of recognition of artistic skills – evident in its failure to refer to STEAM, a similar acronym also including the arts – is in contradiction with the statement that 'creative and arts management roles could increase by more than 30 percent' (Smit et al., 2020). This echoes statements by organisations such as the World Economic Forum regarding the importance of creativity as a skill in the economy of the future (WEF, 2019).

More broadly, the overlapping changes to the labour market and to ways of work, as well as to the current economic paradigm, require focused action to pre-empt their negative impact on the health and well-being of workers. This requires not only preventing burnout and the reinforcement of what has recently been described as the Great Resignation, but also increasing workers' well-being and sense of purpose. Pre-empting the potentially negative impact of these changes on individuals' health and well-being requires a broader commitment to, and sense of caring for, the well-being of workers. Indeed, most people currently living with mental disorders are employed (Leka & Jain, 2017).

**Culture can support the EU and other stakeholders in facing these challenges in many ways. Particularly, studies organised according to category 3. Culture and Community Well-Being, subcategory B. School and Work-Related Well-Being** provide ideas that may inspire action aimed at addressing this challenge in the future.

This challenge could also be addressed by promoting cultural activities and by making them available through education, training, workplaces, rehabilitation and other relevant settings. The cross-sectoral work required to address this challenge reinforces the need to encourage Member States to establish their own culture for health and well-being strategies, and to assign dedicated finance and personnel to the promotion of integrated culture, and health policies and interventions.

### Case stories:

Health service workers singing in a work-place choir perceived an improvement in their mental health, a reduction of depression and an enhanced social connectedness, personnel engagement and enjoyment (Moss & O'Donoghue, 2020). Participation in a theatre based study module enabled personal growth and improved relations with peers among medical students (Nagji et al., 2013).

Healthcare workers and caretakers involved in a range of creative activities experienced reduced stress, increased motivation, energy and job satisfaction, and felt more caring (Shibazaki & Marshall, 2017; Osman et al., 2016; Shuber & Kok, 2020; Anderson & Gustavson, 2016) and better able to deal with their burdens (Leonard & Libera, 2020).

Involvement with the arts helped people acquire new abilities and strategies to cope with stressful experiences (Sun & Buys, 2016). Viewing a visual artwork can also facilitate a reduction of stress (Law et al., 2021). Online music listening helped reduce stress and anxiety in university students (Fiore, 2018). Participation of adults with burnout symptoms in a series of creative workshops led to lower levels of burnout, a higher level of well-being and a higher number of positive experiences (Cacovean et al., 2021).

Arts and crafts were proven to be successful when used as occupational therapy in rehabilitation (Fulton et al., 2016) and leisure occupation for people who are not active on the labour market due to old age (Edwards & Owen-Booth, 2021) or illness (Reynolds et al., 2008; Fenech, 2009).

## 5. An ageing population

The European Union also faces **a demographic challenge: in 2021, 20.8 per cent of the EU population was aged 65 and over** (Eurostat, 2022a). By 2050, this figure is expected to rise to almost 30 per cent of the total population, and between 2016 and 2060, the proportion of people aged over 80 is expected to more than double, to 12.1 per cent. Simultaneously, 'the working age population (those aged 15–64) in the EU is expected to decline by 11.6 per cent. As economic growth until now has been fuelled to a large extent by workforce growth, a smaller labour force might have **adverse effects on the European economy and social systems** (European Commission, n.d.1).'

Additionally, the **health and well-being issues faced by this population are manifold**. Recent evidence suggested that 40 per cent of elderly adults experienced loneliness, and between 7–17 per cent were socially isolated (Health Commons, 2019). In 2050, it is expected that **38.1 million people will be in need of long-term care in the European Union** (Council of the European Union, 2021). Additionally, while life expectancy for women in the EU was, on average, 5.7 years longer than that for men (according to 2020 data), most of those additional years tended to be lived in poor health. More, healthy life years at birth was estimated at 64.5 years for women and 63.5 years for men. It should also be noted that care for the elderly is traditionally done by women in a family setting; this creates an additional burden alongside their working and family life, which may contribute to decreased well-being, if not to mental health problems. More, 'people who are isolated [and lonely] have a 50 per cent greater risk of dying earlier than who are connected, [and] have higher rates of stress, anxiety, depression and cognitive decline. Isolation increases the risk of dementia with 64 per cent (Health Commons, 2019). The number of people with dementia is [...] set to double by 2050 (Alzheimer Europe, 2019).'

**Active ageing** (understood as 'helping people stay in charge of their own lives for as long as possible as they age and, where possible, to contribute to the economy and society' (European Commission, n.d.1)) **prolongs the time before there is a need for long-term care** and its corresponding high costs. Unless healthy ageing is promoted, an ageing population decreases the percentage of the workforce in good health, which increases the need for long-term care and health expenditure, and slows economic growth. Thus, among other things, failure to promote healthy ageing can contribute to the gradual reduction of the percentage of the workforce that remains in good health, an increase for the need for long-term care and health expenditure associated with such care, and slower economic growth.

**Healthy and active ageing** – one of the main priorities of the EU's health and social inclusion policies (European Commission, n.d.1) – can be promoted through coordination of health, long-term care and other services, as well as **the promotion of healthy and sustainable lifestyles** (EuroHealthNet, 2021). Indeed, older people who experience loneliness and social isolation have a 50 per cent greater risk of dying earlier, and an increased risk of dementia by 64 per cent more than those who feel socially connected. They also have higher rates of stress, anxiety, depression and cognitive decline. It is not absurd to suggest that these figures may be connected to the fact that up to 30 per cent of all GP visits in England are directly linked to non-medical problems, such as social isolation and loneliness (NHS, n.d.).

It is crucial, then, that the EU's forthcoming European Care Strategy is 'future-oriented', seeking 'to prevent and minimise care needs. Improved living and working conditions over the life course are key in achieving this (Eurofound, 2022).'

Doing so will improve the resilience of the EU's health systems, one of the key points of the European Health Union, which is in turn one of the EU's priorities for 2019-2024 (European Commission, 2020a), and will make it easier to guarantee long-term care of good quality to all, which is point 18 in the Joint Action Plan on the Social Pillar (European Commission, 2017).

By contributing to active ageing and opposing loneliness and isolation, culture can support the EU's active ageing strategy, promoting health and well-being, and potentially contributing to a decrease in the number of people in long-term care. **Particularly, studies organised according to category 1. Culture and Health, subcategory A. Prevention and Promotion** provide ideas that may inspire action aimed at addressing this challenge in the future.

This challenge could be addressed by promoting cultural activities tailored to this specific age group, making them available via care and community settings, and supporting cultural venues such as museums, libraries and art centres to programme dedicated activities involving the active engagement of elderly people. These actions are cost-effective investments that can potentially enable a longer period of active ageing, alleviating pressure on relatives and unpaid caregivers, and delaying the need for costly long-term care. The use of culture-based social prescribing could also help address it. More broadly, health and care practitioners and professionals would be more likely to support the suggestions above, if they encountered curricula dedicated to the health and well-being benefits of culture during their education and training. This reinforces the need to develop specialised modules.

**Case stories:**

Older people participating in community singing were found to benefit from an increased mental health related quality of life when compared to those engaged in usual activities (Coulton et al., 2015). Feng et al. (2020) found that elderly people at a high risk of future dementia engaged in choral singing benefited from improved cognitive functions and ageing support.

Marquez et al., (2017) found that participation in dance classes positively affected the cognitive function of elderly people.

Elderly women actively engaged in music and painting benefited from improved emotional well-being (Liddle et al., 2012), while dancing might play a role in preventing falls (Cruz-Ferreira et al., 2015, Britten et al., 2017). Group singing had positive effects on the health and well-being of elderly people (Fu et al., 2018, Skingley et al., 2016).

Both receptive forms of cultural participation (e.g., theatre-going) and active ones, such as involvement in drama, singing and visual arts activities, can play a role in increasing the social engagement of elderly people (Meeks et al., 2020; Pearce & Lillyman, 2015; Petrovsky et al., 2020; Brustio et al., 2018).

## 6. The association between ill health and patterns of inequality

Another challenge that must be mentioned in this context is the association between ill health and patterns of inequality. Specifically, health inequalities “reduce economic and social productivity and lead to higher healthcare and welfare cost” (EuroHealthNet, 2019). Research shows that each year €960 billion of the EU’s GDP (9.5 per cent) is lost due to inequalities in health (WHO, 2016b). In this context, “a 50 per cent reduction in gaps in life expectancy would provide monetised benefits to countries ranging from 0.3 per cent to 4.3 per cent of GDP” (EU4Health, 2019).

It is important to note that 90 per cent of health inequalities can be explained by five factors: quality of health care; financial insecurity; poor quality housing and local environment; social exclusion; and lack of decent work or poor working conditions (WHO, 2019c). That is, **the social determinants of health have a bigger impact on individual health than lifestyle**, which continues to be the focus of traditional approaches to prevent non-communicable diseases. Rather, evidence suggests that socio-economic and environmental factors accumulate and affect health. Specifically, the gap in health between the poorest and richest is proportionately attributed to the following factors: 35 per cent to income security and social protection, 29 per cent to living conditions, 19 per cent to social and human capital, 10 per cent to health services and 7 per cent to employment and working conditions (WHO, 2019a).

In this context, **cultural actors such as museums and libraries could be redefined as community well-being spaces**; that is, as entry points for widespread access to social, educational or health services. The latter would be delivered to the whole population, but also targeted at specific groups requiring specialised support, such as the unemployed, the homeless and those in rehabilitation. This echoes EuroHealthNet’s proposal of ‘making local communities “umbrella settings for health” and supporting ‘integrated community care initiative[s]’ (EuroHealthNet, 2022b).

This idea also echoes the ongoing discussions regarding the role of cultural institutions in fostering social inclusion and social justice, as evidenced by the new definition of museum that, at the time of writing, has been proposed by ICOM and is yet to be voted on: ‘a museum is a not-for-profit, permanent institution in the service of society [...] Open to the public, accessible and inclusive, museums foster diversity and sustainability. They operate and communicate ethically, professionally and with the participation of communities, offering varied experiences for education, enjoyment, reflection and knowledge sharing (ICOM, 2022).’

There is scope, therefore, for research and action focused on better understanding the potential impact of culture in action ‘on the social, environmental and economic determinants of health’, contributing to achieving greater equality in health outcomes, namely in the context of the Joint Action “Health Equity in Europe” (European Commission, 2018b).

If health inequalities and inequities are taken into account in the design of strategic action plans, **all the studies mentioned in the scoping review could inspire action** aimed at addressing this challenge in future. More specifically, this challenge could be addressed across the EU with dedicated research and development targeting the links between ill health, patterns of inequality and cultural interventions. These efforts could be led by a dedicated team; e.g., the research and policy staff of a Centre for European Culture, Health and Well-being.

Supporting further research in the field of culture for health and well-being to advance knowledge of the benefits of cultural interventions to address, and prevent the reinforcement of health inequalities, could also help respond to this

challenge. That said, it is important to highlight that, while cultural activities can support broader efforts targeting the social determinants of health, such activities cannot address health inequity or its health consequences on their own.

#### Case stories:

Cultural participation was found to increase knowledge and awareness of various health conditions among underserved communities and provide support networks for disadvantaged individuals suffering from illness (Leckey, 2011; Chung et al., 2009; Cueva, 2010).

Heritage sites (Pennington et al., 2019) and museums (Camic & Chatterjee, 2013) can play a valuable role for social connection and could provide opportunities for access to health related information for disadvantaged groups.

Health workers' participation in a community theatre experience helped in preventing discrimination and fostering community empowerment for older LGBT people in care centres (Hughes et al., 2016).

Theatre and art workshops have been used in social work for the recovery of fragmented identities and improving self-confidence and self-worth among the homeless (Cordero Ramos & Muñoz Bellerin, 2019). Theatre activities also contributed to a respectful environment for adult learners from diverse ethnic and cultural backgrounds to engage in meaningful conversations (Cueva, 2010).

A community-based woodwork group was found to support men with disabilities in community rehabilitation to achieve their rehabilitation goals and improve socialisation (Fulton et al., 2016).

## 7. Promoting active citizenship

A further challenge lies in promoting active citizenship. As a highly complex entity, this topic is central to the future of the European Union, and has been increasingly recognised as such, as illustrated by the 2021-2022 Conference on the Future of Europe. However, this does not remove the need to continue to expand opportunities for citizen-led debates and discussions to take place, and to improve public accountability regarding decision-making at the European level and beyond.

This challenge can be rephrased as that of **empowering citizens**, so that they have the tools and the knowledge that will allow them to engage actively in decision-making regarding their lives and future. This echoes what is increasingly discussed in the heritage sector as participatory governance: the principle that communities should be able to participate in making and interpreting decisions regarding the management of their cultural landscape. This approach could be extended to other topics.

Indeed, the simultaneous phenomena of apathy and political polarisation require an expanding awareness of participatory tools. Empowering people in all walks of life is crucial if they are to be actively engaged in decision-making regarding their lives and future. This is likely to **support individual and collective adaptability and resilience** (RICS, 2021) in the context of an increasingly volatile, uncertain, complex and ambiguous world. Yet fulfilling this potential requires not only rethinking the role of cultural infrastructure in the European continent, but also supporting the sector with sustained funding and opportunities to foster and maintain strong and sustaining relations with local communities.

Cultural spaces – from libraries to art centres, whether big or small – could offer opportunities for communities to meet, participate in discussions and act on local and European challenges. **Particularly, studies organised according to category 3. Culture and Community Well-Being, subcategory D. Community Development** provide ideas that could inspire action aimed at addressing this challenge in future.

This challenge could be addressed by promoting participatory arts projects and other cultural activities tailored to this goal. Additionally, it is necessary to raise awareness (namely, among those who manage cultural spaces) of the evidence-based health and well-being benefits of cultural interventions in this regard.

**Case stories:**

During the COVID-19 pandemic, involvement with arts and creative activities proved to be a preferred leisure activity for people in isolation (Morse et al., 2021) and supported increased well-being and resilience. Creative activities were used as a buffer for negative consequences of quarantine and enabled coping with challenges by using innovative strategies (Kapoor & Kaufman, 2020).

Participatory arts projects may enable community well-being, foster leadership skills and encourage people to take up new roles and responsibilities in their communities (Cameron et al., 2013).

Arts-in-nature activities can be an inclusive medium to foster young peoples' connection with nature and increase their environmental awareness (Moula et al., 2022). Theatre activities were suggested as a platform for public health-promotion, and consultation on public health policies (Nisker et al., 2006). Spencer et al. (2019) proposed urban design as a mediator in tackling social challenges, suggesting that involving communities throughout the design, prototyping and implementation phases supported the adoption of urban solutions, once finalised.

## 8. Supporting the mental health of forcibly displaced people

Finally, in the years ahead, the European Union is likely to continue to face the challenge of **supporting the mental health of forcibly displaced people**, including those fleeing the war in Ukraine, as described in a 2022 paper by the WHO, developed in collaboration with the CultureForHealth project (WHO, 2022a). Indeed, more than 11.9 million people had to leave their homes because of the war in Ukraine in the first half of 2022 alone. In this context, it is important to support the mental well-being of these individuals; this includes supporting the preservation of their personal identity and heritage, and acknowledging their experiences.

As the WHO paper highlights, **displaced people** – whether due to conflict or because of natural disasters, persecution, violence or human rights violations – **experience significant loss, physical hardships and other stressors** that can result in psychological distress. By promoting social inclusion, social cohesion, social acceptance and belonging, arts activities can support psychological, behavioural and social processes that are linked with improved mental well-being. This echoes what the IASC Guidelines on Mental Health and Psychosocial Support in Emergency Settings (IASC, 2007) identify as the types of interventions by government and other actors that can support the mental health and well-being of forcibly displaced people.

The challenge lies, however, in overcoming a patchy and fragmentary approach to this issue. Rather, art and culture could be embedded in a holistic and guaranteed strategy, focused on the health and well-being of forcibly displaced people. More, as the report highlights, 'artistic expression is an indicator of, and a contributor to, vibrant, resilient and healthy societies. Therefore, **investment in the arts means investment in the well-being and social cohesion of both forcibly displaced people and their host communities** (WHO, 2022a).' **Particularly, studies organised according to category 3. Culture and Community Well-Being, subcategory A. Social Inclusion** provide ideas that may inspire action aimed at addressing this challenge in the future.

This challenge could be addressed by the recommendations outlined in the WHO publication. It states that '1. [...] [...] Supporting arts, arts therapies and cultural activities can benefit the mental health and well-being of all people, whether they are forcibly displaced or members of host communities. 2. Arts and cultural activities can form an important part of an organised mental health and psychosocial support response [...]. Incorporat[e] artist led initiatives, arts therapies and arts interventions into the response. 3. People working in museums, libraries, performance venues, cultural centres, heritage sites and other cultural spaces, should consider how their venues can support forcibly displaced people, for example by showcasing their art, creating community theatre plays, organising musical events and concerts, or developing relevant educational activities. 4. In humanitarian responders, [active listening, cultural competence and diversity sensitivity] skills [brought about through artistic methods and practices] can greatly contribute to community empowerment and participation (WHO, 2022a).'

**Case stories:**

Engagement in community arts facilitated an increased quality of life and enjoyment of life as well as a sense of community belonging for new refugees and asylum seekers. Attending the presentation of an arts installation on the life of refugees also resulted in increased feelings of hope and optimism about the future among respondents in the community (Philipp et al., 2015).

Through theatre and storytelling, young migrants and refugees may benefit by liberation from disempowering identities and the re-defining of relationships (Clayton & Hughes, 2015). Creative activities were found to improve the resilience of trauma survivors (Diamond & Shrira, 2018).

**Conflicts of interest**

There is no conflict of interest in this project.

# REFERENCES



1. Abell, R. V., Baird, A. D., & Chalmers, K. A. (2017). Group singing and health-related quality of life in Parkinson's disease. *Health Psychology: Official Journal of the Division of Health Psychology*, 36(1), 55–64. <https://doi.org/10.1037/hea0000412>
2. Ahmed, N., & Schwind, J. K. (2018). Supporting the wellbeing of inner-city middle-school students through mindful and creative reflective activities. *Reflective Practice*, 19(3), 412–425. <https://doi.org/10.1080/14623943.2018.1479691>
3. Alyari, M. (2018). Role of Environmental Psychology in Strategic Development of Urban Public Spaces Based on Aesthetic Needs of Citizens. *Urban Health*. Retrieved from <https://www.urbandesignmentalhealth.com/journal-5---urban-visual-perception.html>
4. Alzheimer Europe. (2019). Dementia in Europe Yearbook 2019: Estimating the prevalence of dementia in Europe. Retrieved from <https://www.alzheimer-europe.org/resources/publications/dementia-europe-yearbook-2019-estimating-prevalence-dementia-europe>
5. Anåker, A., Heylighen, A., Nordin, S., & Elf, M. (2017). Design Quality in the Context of Healthcare Environments: A Scoping Review. *Health Environments Research and Design Journal*, 10(4), 136–150. <https://doi.org/10.1177/1937586716679404>
6. Anderson, L. W., & Gustavson, C. U. (2016). The Impact of a Knitting Intervention on Compassion Fatigue in Oncology Nurses. *Clinical Journal of Oncology Nursing*, 20(1), 102–104. <https://doi.org/10.1188/16.CJON.102-104>
7. Armstrong, V. G., & Ross, J. (2021). Art boxes supporting parents and infants to share creative interactions at home: an art-based response to improve well-being during COVID-19 restrictions. *Public Health*, 193, 109–112. <https://doi.org/10.1016/j.puhe.2021.01.031>
8. Aromataris, E., & Munn, Z. (2020). JBI Manual for Evidence Synthesis. JBI. <https://doi.org/10.46658/JBIMES-20-01>
9. Baker, H. F., Moreland, P. J., Thompson, L. M., Clark-Youngblood, E. M., Solell-Knepler, P. R., Palmietto, N. L., & Gossett, N. A. (2019). Building Empathy and Professional Skills in Global Health Nursing Through Theatre Monologues. *The Journal of Nursing Education*, 58(11), 653–656. <https://doi.org/10.3928/01484834-20191021-07>
10. Bal, P. M., & Veltkamp, M. (2013). How Does Fiction Reading Influence Empathy? An Experimental Investigation on the Role of Emotional Transportation. *PLoS ONE*, 8(1). <https://doi.org/10.1371/journal.pone.0055341>
11. Baltà Portolés, J. (2021). Dance and Well-being, review of evidence and policy perspectives. In EDN, Vol. June. Retrieved from [https://www.ednetwork.eu/uploads/documents/59/EDN\\_Dance%20%26%20Well-being%20Full%20Publication.pdf](https://www.ednetwork.eu/uploads/documents/59/EDN_Dance%20%26%20Well-being%20Full%20Publication.pdf)
12. Barendse, M., Flannery J., Cavanagh C., Aristizabal, M., Becker, S., Berger, E., Breaux, R., Campione-Barr, N., Church, J., Crone, E., Dahl, R., Dennis-Tiwary, T., Dvorsky, M., Dziura, S., van de Groep, S., Ho, T., Kiloren, S., Langberg, J., Larginho, T., Magis-Weinberg, L., Michalska, K., Mullins, J., Nadel, H., Porter, B., Prinstein, M., Redcay, E., Rose, A., Rote, W., Roy, A., Sweijen, S., Telzer, E., Teresi, G., Thomas, A., Pfeifer, J. (2021). Longitudinal change in adolescent depression and anxiety symptoms from before to during the COVID-19 pandemic: an international collaborative of 12 samples. *PsyArXiv 2021*. [Preprint.] Retrieved from <https://psyarxiv.com/hn7us/>
13. Barnes, J. (2014). Dramatopromotesocialandpersonalwell-beinginsix-andseven-year-oldswithcommunicationdifficulties: the Speech Bubbles project. *Perspectives in Public Health*, 134(2), 101–109. <https://doi.org/10.1177/1757913912469486>
14. Barnish, M. S., & Barran, S. M. (2020). A systematic review of active group-based dance, singing, music therapy and theatrical interventions for quality of life, functional communication, speech, motor function and cognitive status in people with Parkinson's disease. *BMC Neurology*, 20(1), 371. <https://doi.org/10.1186/s12883-020-01938-3>
15. Basting, A. (2018). Building creative communities of care: Arts, dementia, and hope in the United States. *Dementia*, 17(6), 744–754. <https://doi.org/10.1177/1471301217740959>
16. Batt-Rawden, K., & Andersen, S. (2020). 'Singing has empowered, enchanted and enthralled me' – choirs for wellbeing? *Health Promotion International*, 35(1), 140–150. <https://doi.org/10.1093/heapro/day122>
17. Bauer-Babef, C. (2022). French presidential candidates unified in calls for mental health care reform. *Euractiv*. Retrieved from <https://www.euractiv.com/section/health-consumers/news/french-presidential-candidates-unified-in-calls-for-mental-health-care-reform/>
18. Bell, D. and Oakley, K. (2015). *Cultural Policy*. London: Routledge.
19. Billington, J. (Ed.). (2019). Reading and mental health. In *Reading and Mental Health*. <https://doi.org/10.1007/978-3-030-21762-4>
20. Bittman, B., Dickson, L., & Coddington, K. (2009). Creative musical expression as a catalyst for quality-of-life improvement in inner-city adolescents placed in a court-referred residential treatment program. *Advances in Mind-Body Medicine*, 24(1), 8–19
21. Blasco, P. G., Benedetto, M. A. C. D., Levites, M. R., & Moreto, G. (2021). Taking care of the health team in times of covid-19: A creative experience from Brazilian health educators. *Educacion Medica*, 22, S19–S22. <https://doi.org/10.1016/j.edumed.2020.11.010>
22. Blessi, G. T., Grossi, E., Sacco, P. L., Pieretti, G., & Ferilli, G. (2016). The contribution of cultural participation to urban well-being. A comparative study in Bolzano/Bozen and Siracusa, Italy. *Cities*, 50, 216–226. <https://doi.org/10.1016/j.cities.2016.05.001>

- [ies.2015.10.009](#)
23. Blignault, I., Smith, S., Woodland, L., Ponzio, V., Ristevski, D., & Kirov, S. (2010). Fear and shame: using theatre to destigmatise mental illness in an Australian Macedonian community. *Health Promotion Journal of Australia: Official Journal of Australian Association of Health Promotion Professionals*, 21(2), 120–126. <https://doi.org/10.1071/he10120>
  24. Blumenfeld, H., & Eisenfeld, L. (2006). Does a mother singing to her premature baby affect feeding in the neonatal intensive care unit? *Clinical Pediatrics*, 45(1), 65–70. <https://doi.org/10.1177/000992280604500110>
  25. Bolmsj , I., Edberg, A.-K., & Andersson, P. L. (2014). The use of drama to support reflection and understanding of the residents' situation in dementia care: a pilot study. *International Journal of Older People Nursing*, 9(3), 183–191. <https://doi.org/10.1111/j.1748-3743.2012.00333.x>
  26. Bonilha, A. G., Onofre, F., Vieira, M. L., Prado, M. Y. A., & Martinez, J. A. B. (2009). Effects of singing classes on pulmonary function and quality of life of COPD patients. *International Journal of Chronic Obstructive Pulmonary Disease*, 4, 1–8.
  27. Booth, R. (2022). EU officials being trained to meditate to help fight climate crisis. *The Guardian*. Retrieved from <https://www.theguardian.com/world/2022/may/04/eu-bureaucrats-being-trained-meditate-help-fight-climate-crisis>
  28. Bosticco, C., & Thompson, T. L. (2005). Narratives and story telling in coping with grief and bereavement. *Omega: Journal of Death and Dying*, 51(1), 1–16. <https://doi.org/10.2190/8TNX-LEBY-5EJY-B0H6>
  29. Bozcuk, H., Ozcan, K., Erdogan, C., Mutlu, H., Demir, M., & Coskun, S. (2017). A comparative study of art therapy in cancer patients receiving chemotherapy and improvement in quality of life by watercolor painting. *Complementary Therapies in Medicine*, 30, 67–72. <https://doi.org/10.1016/j.ctim.2016.11.006>
  30. Bradfield, E. (2021). Subjective experiences of participatory arts engagement of healthy older people and explorations of creative ageing. *Public Health*, 198, 53–58. <https://doi.org/10.1016/j.puhe.2021.06.019>
  31. Bradt, J., Dileo, C., & Shim, M. (2013). Music interventions for preoperative anxiety. *Cochrane Database of Systematic Reviews*, 2013(6). <https://doi.org/10.1002/14651858.CD006908.pub2>
  32. Braveman, P., & Gruskin, S. (2003). Defining equity in health. *Journal of Epidemiology & Community Health*, 57 (4), 254–258.
  33. Brewster, L., & Cox, A. M. (2019). The daily digital practice as a form of self-care: Using photography for everyday well-being. *Health*, 23(6), 621–638. <https://doi.org/10.1177/1363459318769465>
  34. Britten, L., Addington, C., & Astill, S. (2017). Dancing in time: feasibility and acceptability of a contemporary dance programme to modify risk factors for falling in community dwelling older adults. *BMC Geriatrics*, 17(1), 83. <https://doi.org/10.1186/s12877-017-0476-6>
  35. Bronken, B. A., Kirkevold, M., Martinsen, R., & Kvigne, K. (2012). The aphasic storyteller: coconstructing stories to promote psychosocial well-being after stroke. *Qualitative Health Research*, 22(10), 1303–1316. <https://doi.org/10.1177/1049732312450366>
  36. Brownett, T., & Evans, O. (2020). Finding common ground: The conception of community arts festivals as spaces for place-making. *Health & Place*, 61, 102254. <https://doi.org/10.1016/j.healthplace.2019.102254>
  37. Brustio, P. R., Liubicich, M. E., Chiabrero, M., & Rabaglietti, E. (2018). Dancing in the golden age: a study on physical function, quality of life, and social engagement. *Geriatric Nursing (New York, N.Y.)*, 39(6), 635–639. <https://doi.org/10.1016/j.gerinurse.2018.04.013>
  38. Buchan, C. A. (2020). Therapeutic benefits and limitations of participatory photography for adults with mental health problems: A systematic search and literature review. *Journal of Psychiatric and Mental Health Nursing*, 27(5), 657–668. <https://doi.org/10.1111/jpm.12606>
  39. Buetow, S. A., Talmage, A., McCann, C., Fogg, L., & Purdy, S. (2014). Conceptualizing how group singing may enhance quality of life with Parkinson's disease. *Disability and Rehabilitation*, 36(5), 430–433. <https://doi.org/10.3109/09638288.2013.793749>
  40. 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. <https://doi.org/10.1177/1757913912466946>
  41. Burns, N. C., Watts, A., Perales, J., Montgomery, R. N., Morris, J. K., Mahnken, J. D., Lowther, J., & Vidoni, E. D. (2018). The Impact of Creative Arts in Alzheimer's Disease and Dementia Public Health Education. *Journal of Alzheimer's Disease: JAD*, 63(2), 457–463. <https://doi.org/10.3233/JAD-180092>
  42. Cacovean, C., Dascl, M., Zbranca, R., Hente, E., Marga, P., Aniei, A., & Buluga, D. (2021). Impact of artistic interventions on participants with burnout. Case Study. Retrieved from <https://art-wellbeing.eu/research-burnout/>
  43. Caddy, L., Crawford, F., & Page, A. C. (2012). 'Painting a path to wellness': correlations between participating in a creative activity group and improved measured mental health outcome. *Journal of Psychiatric and Mental Health Nursing*, 19(4), 327–333. <https://doi.org/10.1111/j.1365-2850.2011.01785.x>
  44. 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. <https://doi.org/10.1177/1757913912466951>

45. 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. <https://doi.org/10.1177/1359105307086698>
46. Camic, P. M., & Chatterjee, H. J. (2013). Museums and art galleries as partners for public health interventions. *Perspectives in Public Health*, 133(1), 66–71. <https://doi.org/10.1177/1757913912468523>
47. Camic, P. M., Williams, C. M., & Meeten, F. (2013). Does a “Singing Together Group” improve the quality of life of people with a dementia and their carers? A pilot evaluation study. *Dementia (London)*, 12(2), 157–176. <https://doi.org/10.1177/1471301211422761>
48. Campagna, D., Caperna, G., and Montalto, V., (2020). Does Culture Make a Better Citizen? Exploring the Relationship Between Cultural and Civic Participation in Italy. *Social Indicators Research: An International and Interdisciplinary Journal for Quality-of-Life Measurement*, 149(2), 657–686, June. <https://doi.org/10.1007/s11205-020-02265-3>
49. Cantu, A. G., & Fleuriet, K. J. (2018). “Making the Ordinary More Extraordinary”: Exploring Creativity as a Health Promotion Practice Among Older Adults in a Community-Based Professionally Taught Arts Program. *Journal of Holistic Nursing: Official Journal of the American Holistic Nurses’ Association*, 36(2), 123–133. <https://doi.org/10.1177/0898010117697863>
50. Caprilli, S., Anastasi, F., Grotto, R. P. L., Scollo Abeti, M., & Messeri, A. (2007). Interactive music as a treatment for pain and stress in children during venipuncture: a randomized prospective study. *Journal of Developmental and Behavioral Pediatrics*, 28(5), 399–403. <https://doi.org/10.1097/DBP.0b013e31811ff8a7>
51. Carlson, L. M., Ridgeway, J. L., Asiedu, G. B., Wieland, M. L., Sia, I. G., Porraz Capetillo, G., Bernard, M. E., Hanza, M. M., & Njeru, J. W. (2021). Facilitated Stories for Change: Digital Storytelling as a Tool for Engagement in Facilitated Discussion for Reduction of Diabetes-Related Health Disparities Among Rural Latino Patients With Diabetes. *Journal of Transcultural Nursing: Official Journal of the Transcultural Nursing Society*, 32(6), 707–715. <https://doi.org/10.1177/1043659620980816>
52. Carson, A. J., Chappell, N. L., & Knight, C. J. (2007). Promoting health and innovative health promotion practice through a community arts centre. *Health Promotion Practice*, 8(4), 366–374. <https://doi.org/10.1177/1524839906289342>
53. Centre for Urban Design and Mental Health. (2016). Policy brief. In *Journal of Urban Design and Mental Health*.
54. Chang, M., & Netzer, D. (2019). Exploring Natural Materials: Creative Stress-Reduction for Urban Working Adults. *Journal of Creativity in Mental Health*, 14(2), 152–168. <https://doi.org/10.1080/15401383.2019.1568940>
55. Chang, W.-L., Liu, Y.-S., & Yang, C.-F. (2019). Drama Therapy Counseling as Mental Health Care of College Students. *International Journal of Environmental Research and Public Health*, 16(19). <https://doi.org/10.3390/ijerph16193560>
56. Charles, A., & Felton, A. (2020). Exploring young people’s experiences and perceptions of mental health and well-being using photography. *Child and Adolescent Mental Health*, 25(1), 13–20. <https://doi.org/10.1111/camh.12351>
57. Christie, D., Hood, D., & Griffin, A. (2006). Thinking, feeling and moving: drama and movement therapy as an adjunct to a multidisciplinary rehabilitation approach for chronic pain in two adolescent girls. *Clinical Child Psychology and Psychiatry*, 11(4), 569–577. <https://doi.org/10.1177/1359104506067878>
58. Chung, B., Corbett, C. E., Boulet, B., Cummings, J. R., Paxton, K., McDaniel, S., Mercier, S. O., Franklin, C., Mercier, E., Jones, L., Collins, B. E., Koegel, P., Duan, N., Wells, K. B., & Glik, D. (2006). Talking Wellness: a description of a community-academic partnered project to engage an African-American community around depression through the use of poetry, film, and photography. *Ethnicity & Disease*, 16(1 Suppl 1), S67–78.
59. Chung, B., Jones, L., Jones, A., Corbett, C. E., Booker, T., Wells, K. B., & Collins, B. (2009). Using community arts events to enhance collective efficacy and community engagement to address depression in an African American community. *American Journal of Public Health*, 99(2), 237–244. <https://doi.org/10.2105/AJPH.2008.141408>
60. Chung, H. L., Monday, A., & Perry, A. (2017). Promoting the Well-being of Urban Youth through Drama-based Peer Education. *American Journal of Health Behavior*, 41(6), 728–739. <https://doi.org/10.5993/AJHB.41.6.7>
61. Chung, K. S. Y., Lee, E. S. L., Tan, J. Q., Teo, D. J. H., Lee, C. B. L., Ee, S. R., Sim, S. K. Y., & Chee, C. S. (2018). Effects of Playback Theatre on cognitive function and quality of life in older adults in Singapore: A preliminary study. *Australasian Journal on Ageing*, 37(1), E33–E36. <https://doi.org/10.1111/ajag.12498>
62. Clayton, S., & Hughes, G. (2015). The use of film and creative media to liberate young refugee and asylum-seeking people from disempowering identities: A dialogical approach. In *Liberation Practices: Towards Emotional Wellbeing Through Dialogue* (pp. 89–99). London: Taylor and Francis. <https://doi.org/10.4324/9781315758244>
63. Cleyle, S., & Booth, A. (2006). Clear and present questions: Formulating questions for evidence based practice. *Library Hi Tech*, 24(3), 355–368. <https://doi.org/10.1108/07378830610692127>
64. Clift, S., Page, S., Daykin, N., & Peasgood, E. (2016). The perceived effects of singing on the health and well-being of wives and partners of members of the British Armed Forces: a cross-sectional survey. *Public Health*, 138, 93–100. <https://doi.org/10.1016/j.puhe.2016.03.022>
65. Cohen, M. (2017). A systematic review of urban sustainability assessment literature. *Sustainability*, 9(11), 2048.
66. Conference on the Future of Europe. (2022). Conference on the Future of Europe: Report on the Final Outcome. Retrieved from <https://www.europarl.europa.eu/resources/library/media/20220509RES29121/20220509RES29121.pdf>

67. Cooke, A., Smith, D., & Booth, A. (2012). Beyond PICO: the SPIDER tool for qualitative evidence synthesis. *Qualitative Health Research*, 22(10), 1435–1443. <https://doi.org/10.1177/1049732312452938>
68. Cordero Ramos, N., & Muñoz Bellerin, M. (2019). Social work and applied theatre: creative experiences with a group of homeless people in the city of Seville. *European Journal of Social Work*, 22(3), 485–498. <https://doi.org/10.1080/13691457.2017.1366298>
69. Corvo, E., & De Caro, W. (2020). COVID-19 and spontaneous singing to decrease loneliness, improve cohesion, and mental well-being: An Italian experience. *Psychological Trauma: Theory, Research, Practice and Policy*, 12(S1), S247–S248. <https://doi.org/10.1037/tra0000838>
70. Coulton, S., Clift, S., Skingley, A., & Rodriguez, J. (2015). Effectiveness and cost-effectiveness of community singing on mental health-related quality of life of older people: randomised controlled trial. *The British Journal of Psychiatry: The Journal of Mental Science*, 207(3), 250–255. <https://doi.org/10.1192/bjp.bp.113.129908>
71. Council of Europe. (2013). The role of culture and cultural heritage in conflict prevention, transformation, resolution and postconflict action: the Council of Europe approach (2013). Retrieved from <https://edoc.coe.int/en/european-cultural-convention/5785-the-role-of-culture-and-cultural-heritage-in-conflict-prevention-transformation-resolution-and-postconflict-action-the-council-of-europe-approach.html>
72. Council of the European Union. (2021). Key Conclusions on 2021 Long Term Care Report of the Social Protection Committee and the European Commission – Endorsement. <https://data.consilium.europa.eu/doc/document/ST-9144-2021-INIT/en/pdf>
73. Critten, V., & Kucirkova, N. (2019). "It Brings it all Back, all those Good Times; it Makes Me Go Close to Tears". Creating Digital Personalised Stories with People who have Dementia. *Dementia (London)*, 18(3), 864–881. <https://doi.org/10.1177/1471301217691162>
74. Crone, D. M., O'Connell, E. E., Tyson, P. J., Clark-Stone, F., Opher, S., & James, D. V. B. (2013). "Art Lift" intervention to improve mental well-being: An observational study from UK general practice. *International Journal of Mental Health Nursing*, 22(3), 279–286. <https://doi.org/10.1111/j.1447-0349.2012.00862.x>
75. Crone, D. M., Sumner, R. C., Baker, C. M., Loughren, E. A., Hughes, S., & James, D. V. B. (2018). "Artilift" arts-on-referral intervention in UK primary care: Updated findings from an ongoing observational study. *European Journal of Public Health*, 28(3), 404–409. <https://doi.org/10.1093/eurpub/cky021>
76. Cruz-Ferreira, A., Marmeleira, J., Formigo, A., Gomes, D., & Fernandes, J. (2015). Creative Dance Improves Physical Fitness and Life Satisfaction in Older Women. *Research on Aging*, 37(8), 837–855. <https://doi.org/10.1177/0164027514568103>
77. Cseh, G. M., Phillips, L. H., & Pearson, D. G. (2016). Mental and perceptual feedback in the development of creative flow. *Consciousness and Cognition*, 42, 150–161. <https://doi.org/10.1016/j.concog.2016.03.011>
78. Cueva, M. (2010). Readers' theatre as cancer education: an organic inquiry in Alaska awakening possibilities in a living spiral of understanding. *Journal of Cancer Education: The Official Journal of the American Association for Cancer Education*, 25(1), 3–8. <https://doi.org/10.1007/s13187-009-0002-4>
79. Cueva, M., Kuhnley, R., Revels, L., Schoenberg, N. E., Lanier, A., & Dignan, M. (2016). Engaging Elements of Cancer-Related Digital Stories in Alaska. *Journal of Cancer Education: The Official Journal of the American Association for Cancer Education*, 31(3), 500–505. <https://doi.org/10.1007/s13187-015-0826-z>
80. Culture Action Europe & Dâmaso, M. (2021). Research for CULT Committee – The Situation of Artists and Cultural Workers and the Post-COVID-19 Cultural Recovery in the European Union, European Parliament, Policy Department for Structural and Cohesion Policies, Brussels. Retrieved from [https://www.europarl.europa.eu/RegData/etudes/STUD/2021/652250/IPOL\\_STU\(2021\)652250\\_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2021/652250/IPOL_STU(2021)652250_EN.pdf)
81. Cutler et al. (2021). Love in a Cold Climate: Creative Ageing in Finland. Baring Foundation. Retrieved from [https://cdn.baringfoundation.org.uk/wp-content/uploads/BF\\_Creative-ageing-Finland\\_WEB.pdf](https://cdn.baringfoundation.org.uk/wp-content/uploads/BF_Creative-ageing-Finland_WEB.pdf)
82. Cuypers, K., Krokstad, S., Holmen, T. L., Skjei Knudtsen, M., Bygren, L. O., & Holmen, J. (2012). Patterns of receptive and creative cultural activities and their association with perceived health, anxiety, depression and satisfaction with life among adults: the HUNT study, Norway. *Journal of Epidemiology and Community Health*, 66(8), 698–703. <https://doi.org/10.1136/jech.2010.113571>
83. Dadswell, A., Bungay, H., Wilson, C., & Munn-Giddings, C. (2020). The impact of participatory arts in promoting social relationships for older people within care homes. *Perspectives in Public Health*, 140(5), 286–293. <https://doi.org/10.1177/1757913920921204>
84. Danish Refugee Council. (2020). Recommendations for Improving the Mental Health Support System for Refugees in Estonia. <https://drc.ngo/media/qvfn444q/recommendations-for-improving-the-mental-health-support-system-for-refugees-in-estonia.pdf>
85. Das, K. V., Jones-Harrell, C., Fan, Y., Ramaswami, A., Orlove, B., & Botchwey, N. (2020). Understanding subjective well-being: perspectives from psychology and public health. *Public Health Reviews*, 41(1), 1–32.
86. Data Europa. (2017). Special Eurobarometer 466: Cultural Heritage. <https://data.europa.eu/data/datasets/>

- [s2150\\_88\\_1\\_466\\_eng?locale=en](#)
87. Davidson, J. W., McNamara, B., Rosenwax, L., Lange, A., Jenkins, S., & Lewin, G. (2014). Evaluating the potential of group singing to enhance the well-being of older people. *Australasian Journal on Ageing*, 33(2), 99–104. <https://doi.org/10.1111/j.1741-6612.2012.00645.x>
  88. Dawes, J. (2019). Are the Sustainable Development Goals self-consistent and mutually achievable? *Sustainable Development*, 28(1), 101-117. <https://doi.org/10.1002/sd.1975>
  89. Daykin, N., Byrne, E., Soteriou, T., & O'Connor, S. (2008a). The impact of art, design and environment in mental healthcare: A systematic review of the literature. *Journal of The Royal Society for the Promotion of Health*, 128(2), 85–94. <https://doi.org/10.1177/1466424007087806>
  90. Daykin, N., Mansfield, L., Meads, C., Julier, G., Tomlinson, A., Payne, A., Grigsby Duffy, L., Lane, J., D'Innocenzo, G., Burnett, A., Kay, T., Dolan, P., Testoni, S., & Victor, C. (2018). What works for wellbeing? A systematic review of wellbeing outcomes for music and singing in adults. *Perspectives in Public Health*, 138(1), 39–46. <https://doi.org/10.1177/1757913917740391>
  91. Daykin, N., McClean, S., & Bunt, L. (2007). Creativity, identity and healing: participants' accounts of music therapy in cancer care. *Health*, 11(3), 349–370. <https://doi.org/10.1177/1363459307077548>
  92. Daykin, N., Orme, J., Evans, D., Salmon, D., Mceachran, M., & Brain, S. (2008b). The impact of participation in performing arts on adolescent health and behaviour: A systematic review of the literature. *Journal of Health Psychology*, 13(2), 251–264. <https://doi.org/10.1177/1359105307086699>
  93. de Villiers, A. (2016). The role of context in the efficacy of professional development in the creative arts. *Muziki*, 13(2), 67–79. <https://doi.org/10.1080/18125980.2016.1267429>
  94. de-Graft Aikins, A., & Akoi-Jackson, B. (2020). 'Colonial Virus': COVID-19, creative arts and public health communication in Ghana. *Ghana Medical Journal*, 54(4 Suppl), 86–96. <https://doi.org/10.4314/gmj.v54i4s.13>
  95. DeSanto-Madeya, S., Tjia, J., Fitch, C., & Wachholtz, A. (2021). Feasibility and Acceptability of Digital Legacy-Making: An Innovative Story-Telling Intervention for Adults With Cancer. *The American Journal of Hospice & Palliative Care*, 38(7), 772–777. <https://doi.org/10.1177/1049909120971569>
  96. Diamond, S., & Shrira, A. (2018). Psychological vulnerability and resilience of Holocaust survivors engaged in creative art. *Psychiatry Research*, 264, 236–243. <https://doi.org/10.1016/j.psychres.2018.04.013>
  97. Diener, E. (2009). Introduction—The Science of Well-Being: Reviews and Theoretical Articles by Ed Diener. In Diener, E. *The Science of Well-Being: The Collected Works of Ed Diener* (pp 1–10). London: Springer. [https://doi.org/10.1007/978-90-481-2350-6\\_1](https://doi.org/10.1007/978-90-481-2350-6_1)
  98. Dingle, G. A., Williams, E., Jetten, J., & Welch, J. (2017). Choir singing and creative writing enhance emotion regulation in adults with chronic mental health conditions. *The British Journal of Clinical Psychology*, 56(4), 443–457. <https://doi.org/10.1111/bjc.12149>
  99. Djikic, M., Oatley, K., & Moldoveanu, M. C. (2013). Reading other minds. *Scientific Study of Literature*, 3(1), 28–47. <https://doi.org/10.1075/ssol.3.1.06dji>
  100. dos Santos, A., & Lotter, C. (2017). Awakening Musical Facilitators: An Innovative Creative Arts Training Programme for Community Health Workers and Community Health Volunteers. *Muziki*, 14(2), 16–35. <https://doi.org/10.1080/18125980.2017.1385412>
  101. Dowrick, C., Billington, J., Robinson, J., Hamer, A., & Williams, C. (2012). Get into reading as an intervention for common mental health problems: Exploring catalysts for change. *Medical Humanities*, 38(1), 15–20. <https://doi.org/10.1136/med-hum-2011-010083>
  102. Dowson, B., & Schneider, J. (2021). Online singing groups for people with dementia: scoping review. *Public Health*, 194, 196–201. <https://doi.org/10.1016/j.puhe.2021.03.002>
  103. Duarte-García, M. A., & Sigal-Sefchovich, J. R. (2019). Working with Electroacoustic Music in Rural Communities: The use of an interactive music system in the creative process in primary and secondary school education. *Organised Sound*, 24(3), 228–239. <https://doi.org/10.1017/S135577181900030X>
  104. Duncan, R. P., & Earhart, G. M. (2012). Randomized controlled trial of community-based dancing to modify disease progression in Parkinson disease. *Neurorehabilitation and Neural Repair*, 26(2), 132–143. <https://doi.org/10.1177/1545968311421614>
  105. Dunphy, K., Baker, F. A., Dumaresq, E., Carroll-Haskins, K., Eickholt, J., Ercole, M., Kaimal, G., Meyer, K., Sajjani, N., Shamir, O. Y., & Wosch, T. (2019). Creative arts interventions to address depression in older adults: A systematic review of outcomes, processes, and mechanisms. *Frontiers in Psychology*, 9(JAN). <https://doi.org/10.3389/fpsyg.2018.02655>
  106. Edwards, L., & Owen-Booth, B. (2021). An exploration of engagement in community based creative activities as an occupation for older adults. *Irish Journal of Occupational Therapy*, 49(1), 51–57. <https://doi.org/10.1108/IJOT-05-2020-0009>
  107. Efstathopoulou, L., & Bungay, H. (2021). Mental health and resilience: Arts on Prescription for children and young people in a school setting. *Public Health*, 198, 196–199. <https://doi.org/10.1016/j.puhe.2021.07.021>
  108. Ekholm, O., Juel, K., & Bonde, L. O. (2016). Associations between daily musicking and health: Results from a nationwide



- survey in Denmark. *Scandinavian Journal of Public Health*, 44(7), 726–732. <https://doi.org/10.1177/1403494816664252>
109. Elefant, C., Baker, F. A., Lotan, M., Lagesen, S. K., & Skeie, G. O. (2012). The effect of group music therapy on mood, speech, and singing in individuals with Parkinson's disease – a feasibility study. *Journal of Music Therapy*, 49(3), 278–302. <https://doi.org/10.1093/jmt/49.3.278>
110. Eleni, T., & Georgios, L. (2020). Effect of community dance on children's socialization in creative activities centers. *Sport Science*, 14, 79–88. Retrieved from <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85099264620&partnerID=40&md5=6560b959e756212423efb5ff2dfeba37>
111. Elisondo, R. C. (2021). Creative activities, emotions, and resilience during the COVID-19 pandemic: a longitudinal study from Argentina. *Public Health*, 195, 118–122. <https://doi.org/10.1016/j.puhe.2021.04.017>
112. Elisondo, R. C., & Melgar, M. F. (2021). Everyday Creativity in Times of COVID-19: A Qualitative Study from Argentina. In *Creativity* (Vol. 7, Issue 2, pp. 230–250). Sciendo. <https://doi.org/10.2478/ctra-2020-0013>
113. EPRS. (2021). Mental health and the Pandemic. European Parliament. Retrieved from [https://www.europarl.europa.eu/RegData/etudes/BRIE/2021/696164/EPRS\\_BRI\(2021\)696164\\_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2021/696164/EPRS_BRI(2021)696164_EN.pdf)
114. EU OSHA. (n.d.). Healthy Workplaces Campaign. Retrieved from <https://osha.europa.eu/en/campaigns-and-awards/healthy-workplaces-campaigns>
115. EU4Health. (2019). An Economy of Health and Wellbeing. Retrieved from <https://eu4health.eu/an-economy-of-health-and-wellbeing/>
116. Eurofound. (2022). Forthcoming European Care Strategy Must look towards the Future. Retrieved from <https://www.eurofound.europa.eu/publications/blog/forthcoming-european-care-strategy-must-look-towards-the-future>
117. EuroHealthNet. (2019). Health Inequalities in Europe. Retrieved from [https://eurohealthnet.eu/wp-content/uploads/documents/2019/191023\\_Factsheet\\_HealthEquityEU\\_WebLayout.pdf](https://eurohealthnet.eu/wp-content/uploads/documents/2019/191023_Factsheet_HealthEquityEU_WebLayout.pdf)
118. EuroHealthNet. (2021). European Commission Green Paper on Ageing: Fostering Solidarity and Responsibility between Generations. Retrieved from [https://eurohealthnet.eu/wp-content/uploads/documents/2021/210416\\_Consultation\\_ECGreenPaperAgeing.pdf](https://eurohealthnet.eu/wp-content/uploads/documents/2021/210416_Consultation_ECGreenPaperAgeing.pdf)
119. EuroHealthNet. (2022a). An Economy of Wellbeing for Health Equity. Retrieved from <https://eurohealthnet.eu/publication/an-economy-of-wellbeing-for-health-equity/>
120. EuroHealthNet. (2022b). Healthier Together – EU NCD Initiative. Retrieved from [https://eurohealthnet.eu/wp-content/uploads/220406\\_consultation\\_response\\_ncd\\_initiative\\_healthier\\_together\\_stakeholder\\_input.pdf](https://eurohealthnet.eu/wp-content/uploads/220406_consultation_response_ncd_initiative_healthier_together_stakeholder_input.pdf)
121. European Commission (2020g) Workshop for the Experts of the EU Member States on Culture for Social Cohesion: Outcomes and Lessons Learned, 26-27 November 2020. Retrieved from [https://culture.ec.europa.eu/sites/default/files/2021-08/Report-Workshop-Culture-SocialCohesion\\_November-20\\_en.pdf](https://culture.ec.europa.eu/sites/default/files/2021-08/Report-Workshop-Culture-SocialCohesion_November-20_en.pdf)
122. European Commission. (2016). Joint Communication from the European Union and the High Representative: 'Towards an EU strategy for International Cultural Relations' Retrieved from <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=JOIN%3A2016%3A29%3AFIN>
123. European Commission. (2018a). A New European Agenda for Culture – ^267 final. Retrieved from <https://culture.ec.europa.eu/document/a-new-european-agenda-for-culture-swd2018-267-final>
124. European Commission. (2018b). Luxembourg: Joint Action on Health Inequalities Kicks Off, 21-22 June 2018. Retrieved from <https://ec.europa.eu/newsroom/sante/newsletter-archives/9439>
125. European Commission. (2018c). Proposal for a Regulation of the European Parliament and of the Council establishing the Creative Europe program (2021 to 2027) and Repealing Regulation. <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2018%3A366%3AFIN>
126. European Commission. (2019a). Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions: The European Green Deal. COM/2019/640 final. Retrieved from <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2019%3A640%3AFIN>
127. European Commission. (2019b). EC Expert Panel on Effective Ways of Investing in Health. Options to Foster Health Promoting Health Systems. Report of the Expert Panel on Effective Ways of Investing in Health. Retrieved from <https://op.europa.eu/en/publication-detail/-/publication/50c3ef5f-1b6b-11ea-8c1f-01aa75ed71a1/language-en>
128. European Commission. (2019c). European Framework for Action on Cultural Heritage. Retrieved from <https://op.europa.eu/en/publication-detail/-/publication/5a9c3144-80f1-11e9-9f05-01aa75ed71a1>
129. European Commission. (2019d). EU SDG indicator set: Result of the Review in Preparation of the 2019 Edition of the EU SDG Monitoring Report. Retrieved from [https://sdgtoolkit.org/wp-content/uploads/2020/03/Indicators-EU-2019-01-08\\_EU\\_SDG\\_indicator\\_set\\_2019\\_review\\_final\\_report.pdf](https://sdgtoolkit.org/wp-content/uploads/2020/03/Indicators-EU-2019-01-08_EU_SDG_indicator_set_2019_review_final_report.pdf)
130. European Commission. (2020a). Building a European Health Union: Stronger Crisis Preparedness and Response for Europe. Retrieved from [https://ec.europa.eu/commission/presscorner/detail/en/ip\\_20\\_2041](https://ec.europa.eu/commission/presscorner/detail/en/ip_20_2041)

131. European Commission. (2020b). Commission Presents European Skills Agenda for Sustainable Competitiveness, Social Fairness and Resilience. Retrieved from <https://ec.europa.eu/social/main.jsp?langId=en&catId=89&furtherNews=yes&newsId=9723>
132. European Commission. (2020c). EU Pact for Skills. Retrieved from <https://ec.europa.eu/social/main.jsp?catId=1517&langId=en>
133. European Commission. (2020d). Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. A Farm to Fork Strategy for a Fair, Healthy and Environmentally-friendly Food System. Retrieved from <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52020DC0381>
134. European Commission. (2020e). Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. Building a European Health Union: Reinforcing the EU's Resilience for Cross-border Health Threats. Retrieved from [https://ec.europa.eu/info/sites/default/files/communication-european-health-union-resilience\\_en.pdf](https://ec.europa.eu/info/sites/default/files/communication-european-health-union-resilience_en.pdf)
135. European Commission. (2020f). Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. European Skills Agenda for Sustainable Competitiveness, Social Fairness and Resilience COM/2020/274 final. Retrieved from <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52020DC0274>
136. European Commission. (2021a). Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. New European Bauhaus. Retrieved from [https://new-european-bauhaus.europa.eu/system/files/2021-09/COM\(2021\)\\_573\\_EN\\_ACT.pdf](https://new-european-bauhaus.europa.eu/system/files/2021-09/COM(2021)_573_EN_ACT.pdf)
137. European Commission. (2021b). Europe's Beating Cancer Plan: A New EU Approach to Prevention, Treatment and Care. Retrieved from [https://ec.europa.eu/commission/presscorner/detail/en/ip\\_21\\_342](https://ec.europa.eu/commission/presscorner/detail/en/ip_21_342)
138. European Commission. (2021c). Green Paper on Ageing: Fostering Solidarity and Responsibility between Generations. Retrieved from [https://ec.europa.eu/info/sites/default/files/green\\_paper\\_ageing\\_2021\\_en.pdf](https://ec.europa.eu/info/sites/default/files/green_paper_ageing_2021_en.pdf)
139. European Commission. (2021d). Healthy Lifestyle: Commission launches a European-wide Campaign. Retrieved from [https://ec.europa.eu/commission/presscorner/detail/en/ip\\_21\\_4826](https://ec.europa.eu/commission/presscorner/detail/en/ip_21_4826)
140. European Commission. (2021e). Regulation (EU) 2021/817 of the European Parliament and of the Council of 20 May 2021. Establishing Erasmus+: the Union Programme for Education and Training, Youth and Sport and Repealing Regulation (EU) No 1288/2013 (Text with EEA relevance). Retrieved from <https://eur-lex.europa.eu/eli/reg/2021/817/>
141. European Commission. (2021f). Urban Agenda for the EU. Multi-level Governance in Action. 2021 Update. Retrieved from [https://ec.europa.eu/regional\\_policy/sources/docgener/brochure/urban\\_agenda\\_eu\\_2021update\\_en.pdf](https://ec.europa.eu/regional_policy/sources/docgener/brochure/urban_agenda_eu_2021update_en.pdf)
142. European Commission. (2022a). Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on the European care strategy – COM (2022) 440 (2022). Retrieved from <https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1662757168194&uri=COM%3A2022%3A440%3AFIN>
143. European Commission. (2022b). Healthier Together: The Commission Launches €156 Million Initiative on Non-communicable Diseases in Europe. Retrieved from [https://health.ec.europa.eu/latest-updates/healthier-together-commissions-launches-eu156-million-initiative-non-communicable-diseases-europe-2022-06-22\\_en](https://health.ec.europa.eu/latest-updates/healthier-together-commissions-launches-eu156-million-initiative-non-communicable-diseases-europe-2022-06-22_en)
144. European Commission. (n.d.1). Active Ageing. Retrieved from <https://ec.europa.eu/social/main.jsp?langId=en&catId=1062>
145. European Commission. (n.d.2). EU Health Policy Platform. Retrieved from <https://webgate.ec.europa.eu/hpfp/>
146. European Commission. (n.d.3). Horizon Europe. Retrieved from [https://ec.europa.eu/info/research-and-innovation/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe\\_en](https://ec.europa.eu/info/research-and-innovation/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe_en)
147. European Commission. (n.d.4). Recovery and Resilience Facility. Retrieved from [https://ec.europa.eu/info/business-economy-euro/recovery-coronavirus/recovery-and-resilience-facility\\_en](https://ec.europa.eu/info/business-economy-euro/recovery-coronavirus/recovery-and-resilience-facility_en)
148. European Commission/OMC. (2020). Workshop for the Experts of the EU Member States on Culture for Social Cohesion: Outcomes and Lessons Learned, 26-27 November 2020. Retrieved from [https://culture.ec.europa.eu/sites/default/files/2021-08/Report-Workshop-Culture-SocialCohesion\\_November-20\\_en.pdf](https://culture.ec.europa.eu/sites/default/files/2021-08/Report-Workshop-Culture-SocialCohesion_November-20_en.pdf)
149. European Parliament Directorate-General for Parliamentary Research Services & Pasikowska-Schanass, M. (2018). Access to Culture in the European Union: In-depth Analysis. Retrieved from <https://doi.org/https://data.europa.eu/doi/10.2861/741583>
150. European Parliament. (2022a). European Parliament's Special Committee on the COVID-19 Pandemic. Retrieved from <https://www.europarl.europa.eu/news/en/press-room/20220412IPR27113/ep-special-committee-on-covid-19-pandemic-starts-work>
151. European Parliament. (2022b). Report on the Impact of COVID-10 Closures of Educational, Cultural, Youth and Sports Activities on Children and Young People in the EU (2022/2004(INI)). Retrieved from <https://www.europarl.europa.eu/doceo/>

- [document/A-9-2022-0216\\_EN.html](#)
152. European Union. (2007a). European agenda for Culture in a Globalizing World (SEC(2007) 570). Retrieved from <https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=celex:52007DC0242>
  153. European Union. (2007b). Consolidated Version of the Treaty of the Functioning of the European Union. <https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:12012E/TXT:en:PDF>
  154. European Union. (2017). European Pillar of Social Rights. Retrieved from [https://ec.europa.eu/info/sites/default/files/social-summit-european-pillar-social-rights-booklet\\_en.pdf](https://ec.europa.eu/info/sites/default/files/social-summit-european-pillar-social-rights-booklet_en.pdf)
  155. European Union. (2020). Preparatory Action – Bottom-up Policy Development for Culture & Well-being in the EU | Culture and Creativity. Retrieved from <https://culture.ec.europa.eu/calls/preparatory-action-bottom-up-policy-development-for-culture-well-being-in-the-eu>
  156. European Union. (2021). Regulation (EU) 2021/522 of the European Parliament and of the Council of 24 March 2021. Establishing a Programme for the Union's action in the field of health ('EU4Health Programme') for the period 2021-2027, and repealing Regulation (EU) No 282/2014. Retrieved from [https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L\\_.2021.107.01.0001.01.ENG](https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2021.107.01.0001.01.ENG)
  157. Eurostat. (2019). Healthcare Expenditure Statistics. Retrieved from [https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Healthcare\\_expenditure\\_statistics#Healthcare\\_expenditure](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Healthcare_expenditure_statistics#Healthcare_expenditure)
  158. Eurostat. (2021). 3% of Healthcare Expenditure Spent on Preventive Care. Retrieved from <https://ec.europa.eu/eurostat/web/products-eurostat-news/-/ddn-20210118-1>
  159. Eurostat. (2022a). Population Structure and Ageing. Retrieved from [https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Population\\_structure\\_and\\_ageing](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Population_structure_and_ageing)
  160. Eurostat. (2022b). Preventive Health Care Expenditure Statistics. Retrieved from [https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Preventive\\_health\\_care\\_expenditure\\_statistics](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Preventive_health_care_expenditure_statistics)
  161. Fancourt, D., & Ali, H. (2019). Differential use of emotion regulation strategies when engaging in artistic creative activities amongst those with and without depression. *Scientific Reports*, 9(1), 9897. <https://doi.org/10.1038/s41598-019-46138-3>
  162. Fancourt, D., & Finn, S. (2019). What is the evidence on the role of the arts in improving health and well-being? A scoping review. In Health Evidence Network (HEN) synthesis report 67. WHO Regional Office for Europe. Retrieved from <https://apps.who.int/iris/bitstream/handle/10665/329834/9789289054553-eng.pdf>
  163. Fancourt, D., & Perkins, R. (2018). Effect of singing interventions on symptoms of postnatal depression: Three-arm randomised controlled trial. *British Journal of Psychiatry*, 212(2), 119–121. <https://doi.org/10.1192/bjp.2017.29>
  164. Fancourt, D., & Steptoe, A. (2018). Cultural engagement predicts changes in cognitive function in older adults over a 10 year period: Findings from the English Longitudinal Study of Ageing. *Scientific Reports*, 8(1), 1–8. <https://doi.org/10.1038/s41598-018-28591-8>
  165. Fancourt, D., Warran, K., Finn, S., & Wiseman, T. (2019). Psychosocial singing interventions for the mental health and well-being of family carers of patients with cancer: results from a longitudinal controlled study. *BMJ Open*, 9(8), e026995. <https://doi.org/10.1136/bmjopen-2018-026995>
  166. Fancourt, D., Warren, K., & Aughterson, H. (2020). Evidence Summary for Policy: The role of arts in improving health & well-being. Report to the Department for Digital, Culture, Media & Sport. London: DCMS. Retrieved from [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/929773/DCMS\\_report\\_April\\_2020\\_final\\_1.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/929773/DCMS_report_April_2020_final_1.pdf)
  167. Fenech, A. (2009). Interactive drama in complex neurological disability management. *Disability and Rehabilitation*, 31(2), 118–130. <https://doi.org/10.1080/09638280701850900>
  168. Feng, L., Romero-Garcia, R., Suckling, J., Tan, J., Larbi, A., Cheah, I., Wong, G., Tsakok, M., Lanskey, B., Lim, D., Li, J., Yang, J., Goh, B., Teck, T. G. C., Ho, A., Wang, X., Yu, J.-T., Zhang, C., Tan, C., Chua, M., Li, J., Totman, J., Wong, C., Loh, M., Foo, R., Tan, C.H., Goh, L.G., Mahendran, R., Kennedy, B.K., & Kua, E.-H. (2020). Effects of choral singing versus health education on cognitive decline and aging: a randomized controlled trial. *Aging*, 12(24), 24798–24816. <https://doi.org/10.18632/aging.202374>
  169. Ferraro, F., Pais, L., Rebelo dos Santos, N. (2015). Decent work: An aim for all made by all. *International Journal of Social Sciences*, IV(3), 30-42. <https://doi.org/10.20472/SS2015.4.3.003>
  170. Fiore, J. (2018). A Pilot Study Exploring the Use of an Online Pre-Composed Receptive Music Experience for Students Coping with Stress and Anxiety. *Journal of Music Therapy*, 55(4), 383–407. <https://doi.org/10.1093/jmt/thy017>
  171. Fletcher, S., & Mullett, J. (2016). Digital stories as a tool for health promotion and youth engagement. *Canadian Journal of Public Health = Revue Canadienne de Sante Publique*, 107(2), e183–e187. <https://doi.org/10.17269/cjph.107.5266>
  172. Flicker, S., Wilson, C., Monchalain, R., Restoule, J.-P., Mitchell, C., Larkin, J., Prentice, T., Jackson, R., & Oliver, V. (2020). The Impact of Indigenous Youth Sharing Digital Stories About HIV Activism. *Health Promotion Practice*, 21(5), 802–810. <https://>



- [doi.org/10.1177/1524839918822268](https://doi.org/10.1177/1524839918822268)
173. Forouzandeh, N., Drees, F., Forouzandeh, M., & Darakhshandeh, S. (2020). The effect of interactive games compared to painting on preoperative anxiety in Iranian children: A randomized clinical trial. *Complementary Therapies in Clinical Practice*, 40, 101211. <https://doi.org/10.1016/j.ctcp.2020.101211>
  174. Fota, A. (2022). Brussels prescribes visits to Manneken Pis and museums for mental health. Politico. Retrieved from <https://www.politico.eu/article/brussels-museum-visits-mental-health-culture/>
  175. Fraser, K. D., O'Rourke, H. M., Wiens, H., Lai, J., Howell, C., & Brett-Maclean, P. (2015). A scoping review of research on the arts, aging, and quality of life. *Gerontologist*, 55(4), 719–729. <https://doi.org/10.1093/geront/gnv027>
  176. Fritz, E., Veldsman, T., & Lemont, S. E. (2013). Forging collaborative relationships through creative expressive arts therapy as school community intervention. *Education as Change*, 17(1), 77–88. <https://doi.org/10.1080/16823206.2013.773930>
  177. Fu, M. C., Belza, B., Nguyen, H., Logsdon, R., & Demorest, S. (2018). Impact of group-singing on older adult health in senior living communities: A pilot study. *Archives of Gerontology and Geriatrics*, 76, 138–146. <https://doi.org/10.1016/j.arch-ger.2018.02.012>
  178. Fu, V. X., Oomens, P., Sneiders, D., van den Berg, S. A. A., Feelders, R. A., Wijnhoven, B. P. L., & Jeekel, J. (2019). The Effect of Perioperative Music on the Stress Response to Surgery: A Meta-analysis. *Journal of Surgical Research*, 244, 444–455. <https://doi.org/10.1016/j.jss.2019.06.052>
  179. Fulton, S., Clohesy, D., Wise, F. M., Woolley, K., & Lannin, N. (2016). A goal-directed woodwork group for men in community rehabilitation – A pilot project. *Australian Occupational Therapy Journal*, 63(1), 29–36. <https://doi.org/10.1111/1440-1630.12242>
  180. Fusar-Poli, P., Correll, C., Arango, C., Berk, M., Patel, V., Ioannidis, J. (2021). Preventive psychiatry: a blueprint for improving the mental health of young people. *World Psychiatry*, 20(2), 200–221. <https://doi.org/10.1002/wps.20869>
  181. Ganzoni, C., Arslani, K., Pfister, O., Freese, M., Strobel, W., Mueller, C., & Tobler, D. (2020). Choir singing improves respiratory muscle strength and quality of life in patients with structural heart disease – HeartChoir: a randomised clinical trial. *Swiss Medical Weekly*, 150, w20346. <https://doi.org/10.4414/smw.2020.20346>
  182. Gao, Q., Hall, A., Linder, S., Leonard, A., & Qian, M. (2021). Promoting Head Start Dual Language Learners' Social and Emotional Development Through Creative Drama. *Early Childhood Education Journal*, 50, 761–771. <https://doi.org/10.1007/s10643-021-01198-x>
  183. García, J. (2016). Time use patterns of Spanish people at weekends: in search of what, who and when. *Leisure Studies*, 36(6), 793–810. <https://doi.org/10.1080/02614367.2016.1252786>
  184. Gardner, H., Leeding, J., Stanley, E., Ball, S., Leach, B., Bousfield, J., Smith, P., Merjanovic, S. (2021). Arts-based Engagement: a Guide for Community Groups, Artists and Researchers. THIS Institute. Retrieved from <https://www.thisinstitute.cam.ac.uk/research-articles/arts-based-engagement/>
  185. Ghosh, S. K., Patil, R. R., Tiwari, S., & Dash, A. P. (2006). A community-based health education programme for bio-environmental control of malaria through folk theatre (Kalajatha) in rural India. *Malaria Journal*, 5, 123. <https://doi.org/10.1186/1475-2875-5-123>
  186. Gick, M. L., & Nicol, J. J. (2016). Singing for respiratory health: theory, evidence and challenges. *Health Promotion International*, 31(3), 725–734. <https://doi.org/10.1093/heapro/dav013>
  187. Gilliam, M., Orzalli, S., Heathcock, S., Sutherland, E., Jagoda, P., Menendez, A., & Ojengbede, O. (2012). From intervention to invitation: reshaping adolescent sexual health through story telling and games. *African Journal of Reproductive Health*, 16(2), 189–196. Retrieved from <https://tspace.library.utoronto.ca/bitstream/1807/61699/1/rh12028.pdf>
  188. Goldenberg, R. B. (2018). Singing Lessons for Respiratory Health: A Literature Review. *Journal of Voice : Official Journal of the Voice Foundation*, 32(1), 85–94. <https://doi.org/10.1016/j.jvoice.2017.03.021>
  189. Goodley, D., & Runswick-Cole, K. (2011). Something in the air? creativity, culture and community . In *Research in Drama Education*, 16(1), 75–91. <https://doi.org/10.1080/13569783.2011.541610>
  190. Gray, N., Oré 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. <https://doi.org/10.1097/FCH.0b013e3181e4bbc6>
  191. Gross, S. M., Danilova, D., Vandehey, M. A., & Diekhoff, G. M. (2015). Creativity and dementia: does artistic activity affect well-being beyond the art class? *Dementia (London)*, 14(1), 27–46. <https://doi.org/10.1177/1471301213488899>
  192. Grossi, E., Blessi, G. T., Sacco, P. L., & Buscema, M. (2012). The Interaction Between Culture, Health and Psychological Well-Being: Data Mining from the Italian Culture and Well-Being Project. *Journal of Happiness Studies*, 13(1), 129–148. <https://doi.org/10.1007/s10902-011-9254-x>
  193. Grossi, E., Sacco, P. L., Blessi, G. T., & Cerutti, R. (2011). The Impact of Culture on the Individual Subjective Well-Being of the Italian Population: An Exploratory Study. *Applied Research in Quality of Life*, 6(4), 387–410. <https://doi.org/10.1007/s11482-010-9135-1>

194. Grossi, E., Tavano Blessi, G., & Sacco, P. L. (2018). Magic Moments: Determinants of Stress Relief and Subjective Wellbeing from Visiting a Cultural Heritage Site. *Culture, Medicine, and Psychiatry* 2018 43:1, 43(1), 4–24. <https://doi.org/10.1007/S11013-018-9593-8>
195. Hagemann, V. (2021). Benefits of Collective Singing: An International Systematic Review on “Choral Research”.
196. Hajdu, G., & Hajdu, T. (2016). The Impact of Culture on Well-Being: Evidence from a Natural Experiment. *Journal of Happiness Studies*, 17(3), 1089–1110. <https://doi.org/10.1007/s10902-015-9633-9>
197. Hammar, L. M., Emami, A., Götell, E., & Engström, G. (2011). The impact of caregivers' singing on expressions of emotion and resistance during morning care situations in persons with dementia: an intervention in dementia care. *Journal of Clinical Nursing*, 20(7–8), 969–978. <https://doi.org/10.1111/j.1365-2702.2010.03386.x>
198. Hansen, E., Sund, E., Knudtsen, M. S., Krokstad, S., & Holmen, T. L. (2015). Cultural activity participation and associations with self-perceived health, life-satisfaction and mental health: The Young HUNT Study, Norway. *BMC Public Health*, 15(1), 1–8. <https://doi.org/10.1186/s12889-015-1873-4>
199. Hardoon, D., Hey, N., Brunetti, S. (2020). Wellbeing evidence at the heart of policy. Retrieved from [https://whatworkswell-being.org/wp-content/uploads/2020/02/WEHP-full-report-Feb2020\\_.pdf](https://whatworkswell-being.org/wp-content/uploads/2020/02/WEHP-full-report-Feb2020_.pdf)
200. Hauck, M., Metzner, S., Rohlfes, F., Lorenz, J., & Engel, A. K. (2013). The influence of music and music therapy on pain-induced neuronal oscillations measured by magnetencephalography. *Pain*, 154(4), 539–547. <https://doi.org/10.1016/j.pain.2012.12.016>
201. Health Commons. (2019). Impact of Loneliness and Isolation. Health Commons Fact Sheet Series No 1. Retrieved from <https://www.artscare.ca/wp-content/uploads/2021/11/Loneliness-Isolation-v6-3.pdf>
202. Health Inequalities. (n.d.1). Social Determinants of Health. Retrieved from <https://health-inequalities.eu/glossary/social-determinants-of-health/>
203. Health Inequalities. (n.d.2) Policy. Retrieved from <https://health-inequalities.eu/action/policy-action-to-reduce-health-inequalities/>
204. Hilse, C., Griffiths, S., & Corr, S. (2007). The impact of participating in a poetry workshop. *British Journal of Occupational Therapy*, 70(10), 431–438. <https://doi.org/10.1177/030802260707001004>
205. Hole, J., Hirsch, M., Ball, E., & Meads, C. (2015). Music as an aid for postoperative recovery in adults: A systematic review and meta-analysis. *The Lancet*, 386(10004), 1659–1671. [https://doi.org/10.1016/S0140-6736\(15\)60169-6](https://doi.org/10.1016/S0140-6736(15)60169-6)
206. Holt, N. J. (2020). Tracking momentary experience in the evaluation of arts-on-prescription services: using mood changes during art workshops to predict global wellbeing change. *Perspectives in Public Health*, 140(5), 270–276. <https://doi.org/10.1177/1757913920913060>
207. Huang, R., Wang, J., Wu, D., Long, H., Yang, X., Liu, H., Gao, X., Zhao, R., & Lai, W. (2016). The effects of customised brainwave music on orofacial pain induced by orthodontic tooth movement. *Oral Diseases*, 22(8), 766–774. <https://doi.org/10.1111/odi.12542>
208. Hughes, A. K., Luz, C., Hall, D., Gardner, P., Hennessey, C. W., & Lammers, L. (2016). Transformative Theatre: A Promising Educational Tool for Improving Health Encounters With LGBT Older Adults. *Gerontology & Geriatrics Education*, 37(3), 292–306. <https://doi.org/10.1080/02701960.2015.1127812>
209. Hundt, G. L., Bryanston, C., Lowe, P., Cross, S., Sandall, J., & Spencer, K. (2011). Inside “Inside View”: reflections on stimulating debate and engagement through a multimedia live theatre production on the dilemmas and issues of pre-natal screening policy and practice. *Health Expectations : An International Journal of Public Participation in Health Care and Health Policy*, 14(1), 1–9. <https://doi.org/10.1111/j.1369-7625.2010.00597.x>
210. IASC. (2007). IASG Guidelines on Mental Health and Psychosocial Support in Emergency Settings. OCHA Services. Retrieved from <https://interagencystandingcommittee.org/iasc-task-force-mental-health-and-psychosocial-support-emergency-settings/iasc-guidelines-mental-health-and-psychosocial-support-emergency-settings-2007>
211. ICOM. (2022). The ICOM Advisory Council selects the museum definition proposal to be voted in Prague. Retrieved from <https://icom.museum/en/news/the-icom-advisory-council-selects-the-museum-definition-proposal-to-be-voted-in-prague/>
212. Irons, J. Y., Hancox, G., Vella-Burrows, T., Han, E.-Y., Chong, H.-J., Sheffield, D., & Stewart, D. E. (2021). Group singing improves quality of life for people with Parkinson's: an international study. *Aging & Mental Health*, 25(4), 650–656. <https://doi.org/10.1080/13607863.2020.1720599>
213. Irons, J. Y., Kuipers, P., Wan, A., & Stewart, D. E. (2020a). Group Singing Has Multiple Benefits in the Context of Chronic Pain: An Exploratory Pilot Study. *Pain Management Nursing : Official Journal of the American Society of Pain Management Nurses*, 21(3), 259–264. <https://doi.org/10.1016/j.pmn.2019.07.008>
214. Irons, J. Y., Sheffield, D., Ballington, F., & Stewart, D. E. (2020b). A systematic review on the effects of group singing on persistent pain in people with long-term health conditions. *European Journal of Pain (London, England)*, 24(1), 71–90. <https://doi.org/10.1002/ejp.1485>

215. Isis, P. D., Bush, J., Siegel, C. A., & Ventura, Y. (2010). Empowering students through creativity: Art therapy in Miami-Dade County public schools. *Art Therapy*, 27(2), 56–61. <https://doi.org/10.1080/07421656.2010.10129712>
216. JAHEE. (n.d.) Joint Action Health Equity Europe. Retrieved from <https://jahee.iss.it>
217. Jeannotte, S. (2017) The Social Effects of Culture – A Literature Review. University of Ottawa. <https://doi.org/10.13140/RG.2.2.15680.84482>
218. Jensen, A. (2014). Considering 'first, do no harm' in arts and health practice. *Journal of Applied Arts & Health*, 5 (3), 331–339. [https://doi.org/10.1386/jaah.5.3.331\\_1](https://doi.org/10.1386/jaah.5.3.331_1)
219. Jensen, A. (2018a). Mental health recovery and arts engagement. *Journal of Mental Health Training, Education and Practice*, 13(3), 157–166. <https://doi.org/10.1108/JMHTEP-08-2017-0048>
220. Jensen, A. (2018b). Interdisciplinary Arts and Health Practice with an Institutional Logics Perspective. *Arts & Health*, 11(3), 219–231. <https://doi.org/10.1080/17533015.2018.1443950>
221. Jensen, A. (2019). Culture Vitamins – an Arts on Prescription project in Denmark. *Perspectives in Public Health*, 139(3), 131–136. <https://doi.org/10.1177/1757913919836145>
222. Jensen, A., Torrissen, W., & Stickley, T. (2020). Arts and public mental health: exemplars from Scandinavia. *Public Health Panorama*, 6(1), 193–200. <https://apps.who.int/iris/bitstream/handle/10665/331582/php-6-1-193-200-eng.pdf>
223. Jensen, A., & Bonde, L. O. (2018). The use of arts interventions for mental health and wellbeing in health settings. *Perspectives in Public Health*, 138(4), 209–214. <https://doi.org/10.1177/1757913918772602>
224. Jensen, A., & Bonde, L. O. (2020). An Arts on Prescription Programme: Perspectives of the Cultural Institutions. *Community Mental Health Journal*, 56(8), 1473–1479. <https://doi.org/10.1007/s10597-020-00591-x>
225. Jones, E. K., Kittendorf, A. L., & Kumagai, A. K. (2017). Creative art and medical student development: a qualitative study. *Medical Education*, 51(2), 174–183. <https://doi.org/10.1111/medu.13140>
226. Joronen, K., Rankin, S. H., & Astedt-Kurki, P. (2008). School-based drama interventions in health promotion for children and adolescents: systematic review. *Journal of Advanced Nursing*, 63(2), 116–131. <https://doi.org/10.1111/j.1365-2648.2008.04634.x>
227. Julier, G., Duffy, L. G., Kay, T., Meads, C., Daykin, N., Tapson, C., Dolan, P., Testoni, S., & Victor, C. (2018). Visual Art and Mental Health – brief version. January, 1–66. Full version at <https://arro.anglia.ac.uk/id/eprint/702832/1/Full-report-art-mental-health-wellbeing-Jan2018.pdf>
228. Kaltsatou, A., Kouidi, E., Fountoulakis, K., Sipka, C., Theochari, V., Kandylis, D., & Deligiannis, A. (2015). Effects of exercise training with traditional dancing on functional capacity and quality of life in patients with schizophrenia: a randomized controlled study. *Clinical Rehabilitation*, 29[1] A. K(9), 882–891. <https://doi.org/10.1177/0269215514564085>
229. Kamo, N., Carlson, M., Brennan, R. T., & Earls, F. (2008). Young citizens as health agents: use of drama in promoting community efficacy for HIV/AIDS. *American Journal of Public Health*, 98(2), 201–204. <https://doi.org/10.2105/AJPH.2007.113704>
230. Kapoor, H., & Kaufman, J. C. (2020). Meaning-Making Through Creativity During COVID-19. *Frontiers in Psychology*, 11. <https://doi.org/10.3389/fpsyg.2020.595990>
231. Keisari, S., Gesser-Edelsburg, A., Yaniv, D., & Palgi, Y. (2020). Playback theatre in adult day centers: A creative group intervention for community-dwelling older adults. *PloS One*, 15(10), e0239812. <https://doi.org/10.1371/journal.pone.0239812>
232. Kelaher, M., Dunt, D., Berman, N., Curry, S., Joubert, L., & Johnson, V. (2014). Evaluating the health impacts of participation in Australian community arts groups. *Health Promotion International*, 29(3), 392–402. <https://doi.org/10.1093/heapro/das073>
233. Kelly, C. G., Cudney, S., & Weinert, C. (2012). Use of creative arts as a complementary therapy by rural women coping with chronic illness. *Journal of Holistic Nursing: Official Journal of the American Holistic Nurses' Association*, 30(1), 48–54. <https://doi.org/10.1177/0898010111423418>
234. Kennedy, H., Marley, M., Torres, K., Edelblute, A., & Novins, D. (2020). "Be creative and you will reach more people": youth's experiences participating in an arts-based social action group aimed at mental health stigma reduction. *Arts & Health*, 12(1), 23–37. <https://doi.org/10.1080/17533015.2018.1534249>
235. Kern, P., & Aldridge, D. (2006). Using embedded music therapy interventions to support outdoor play of young children with autism in an inclusive community-based child care program. *Journal of Music Therapy*, 43(4), 270–294. <https://doi.org/10.1093/jmt/43.4.270>
236. Kiernan, F., Chmiel, A., Garrido, S., Hickey, M., & Davidson, J. W. (2021). The Role of Artistic Creative Activities in Navigating the COVID-19 Pandemic in Australia. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.696202>
237. Kim, H. (2015). Community and art: creative education fostering resilience through art. *Asia Pacific Education Review*, 16(2), 193–201. <https://doi.org/10.1007/s12564-015-9371-z>
238. Kim, M. J., & Lee, C. W. (2016). Health benefits of dancing activity among Korean middle-aged women. *International Journal of Qualitative Studies on Health and Well-Being*, 11, 31215. <https://doi.org/10.3402/qhw.v11.31215>

239. Koh, W. L. E., Low, F., Kam, J. W., Rahim, S., Ng, W. F., & Ng, L. L. (2020). Person-centred creative dance intervention for persons with dementia living in the community in Singapore. *Dementia* (London, England), 19(7), 2430–2443. <https://doi.org/10.1177/1471301218823439>
240. Komakech, M. D. C. (2020). Under-the-Mango-Tree: a theatre-based male EMTCT engagement intervention in post-conflict northern Uganda. *Global Health Promotion*, 27(3), 113–121. <https://doi.org/10.1177/1757975919873653>
241. Kontos, P., Grigorovich, A., Kosurko, A., Bar, R. J., Herron, R. V., Menec, V. H., & Skinner, M. W. (2021). Dancing with Dementia: Exploring the Embodied Dimensions of Creativity and Social Engagement. *The Gerontologist*, 61(5), 714–723. <https://doi.org/10.1093/geront/gnaa129>
242. Koponen, T., Honkasalo, M.-L., & Rautava, P. (2018). Cultural plan model: integrating cultural and creative activities into care units for the elderly. *Arts and Health*, 10(1), 65–71. <https://doi.org/10.1080/17533015.2017.1315436>
243. Kortesuoma, R.-L., Punamäki, R.-L., & Nikkonen, M. (2008). Hospitalized children drawing their pain: the contents and cognitive and emotional characteristics of pain drawings. *Journal of Child Health Care: For Professionals Working with Children in the Hospital and Community*, 12(4), 284–300. <https://doi.org/10.1177/1367493508096204>
244. Krause, A. E., Lloyd-Smith, A., & Hajek, J. (2020). The role of community language radio for understanding creativity and wellbeing in migrant communities in Australia. *International Journal of Wellbeing*, 10(5), 83–99. <https://doi.org/10.5502/ijw.v10i5.1495>
245. Kucirkova, N., Messer, D., Critten, V., & Harwood, J. (2014). Story-making on the iPad when children have complex needs: Two case studies. *Communication Disorders Quarterly*, 36(1), 44–54. <https://doi.org/10.1177/1525740114525226>
246. la Cour, K., Josephsson, S., Tishelman, C., & Nygård, L. (2007). Experiences of engagement in creative activity at a palliative care facility. *Palliative & Supportive Care*, 5(3), 241–250. <https://doi.org/10.1017/s1478951507000405>
247. Laing, C. M., Moules, N. J., Estefan, A., & Lang, M. (2017). "Stories Take Your Role Away from You": Understanding the Impact on Health Care Professionals of Viewing Digital Stories of Pediatric and Adolescent/Young Adult Oncology Patients. *Journal of Pediatric Oncology Nursing: Official Journal of the Association of Pediatric Oncology Nurses*, 34(4), 261–271. <https://doi.org/10.1177/1043454217697023>
248. Laing, C. M., Moules, N. J., Estefan, A., & Lang, M. (2017). Stories That Heal: Understanding the Effects of Creating Digital Stories with Pediatric and Adolescent/Young Adult Oncology Patients. *Journal of Pediatric Oncology Nursing: Official Journal of the Association of Pediatric Oncology Nurses*, 34(4), 272–282. <https://doi.org/10.1177/1043454216688639>
249. Laitinen, L., Jakonen, O., Lahtinen, E., Lilja-Vilherlampi, L.-M., (2020) From grass-roots activities to national policies – the state of arts and health in Finland. *Arts and Health*. 14 (1). <https://doi.org/10.1080/17533015.2020.1827275>
250. Law, M., Karulkar, N., & Broadbent, E. (2021). Evidence for the effects of viewing visual artworks on stress outcomes: a scoping review. *BMJ Open*, 11(6), e043549. <https://doi.org/10.1136/BMJOPEN-2020-043549>
251. Lazarou, I., Parastatidis, T., Tsolaki, A., Gkioka, M., Karakostas, A., Douka, S., & Tsolaki, M. (2017). International Ballroom Dancing Against Neurodegeneration: A Randomized Controlled Trial in Greek Community-Dwelling Elders with Mild Cognitive impairment. *American Journal of Alzheimer's Disease and Other Dementias*, 32(8), 489–499. <https://doi.org/10.1177/1533317517725813>
252. Leckey, J. (2011). The therapeutic effectiveness of creative activities on mental well-being: a systematic review of the literature. *Journal of Psychiatric and Mental Health Nursing*, 18(6), 501–509. <https://doi.org/10.1111/j.1365-2850.2011.01693.x>
253. Leenders, M., Dyer, G. M., & Saunders, V. (2011). Work in progress: Creative Recovery to creative livelihoods. *Australasian Psychiatry: Bulletin of Royal Australian and New Zealand College of Psychiatrists*, 19 Suppl 1, S45–8. <https://doi.org/10.3109/10398562.2011.583051>
254. Leka, S. & Jain, A. (2017). EU Compass for Action on Mental Health and Well-Being. *Mental Health in the Workplace in Europe: Consensus Paper*. Retrieved from [https://health.ec.europa.eu/system/files/2017-07/compass\\_2017\\_workplace\\_en\\_0.pdf](https://health.ec.europa.eu/system/files/2017-07/compass_2017_workplace_en_0.pdf)
255. Leonard, K., & Libera, A. (2020). Improvised Caregiving or How a Famous Comedy Theatre Found Itself in Health Care. *AMA Journal of Ethics*, 22(7), E619–623. <https://doi.org/10.1001/amajethics.2020.619>
256. Levin, T., Scott, B. M., Borders, B., Hart, K., Lee, J., & Decanini, A. (2007). Aphasia Talks: photography as a means of communication, self-expression, and empowerment in persons with aphasia. *Topics in Stroke Rehabilitation*, 14(1), 72–84. <https://doi.org/10.1310/tsr1401-72>
257. Lewis, A., Cave, P., Stern, M., Welch, L., Taylor, K., Russell, J., Doyle, A.-M., Russell, A.-M., McKee, H., Clift, S., Bott, J., & Hopkinson, N. S. (2016). Singing for Lung Health—a systematic review of the literature and consensus statement. *NPJ Primary Care Respiratory Medicine*, 26, 16080. <https://doi.org/10.1038/npjpcrm.2016.80>
258. 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. <https://doi.org/10.1111/j.1741-6612.2011.00574.x>
259. Lister, S., Tanguay, D., Snow, S., & D'Amico, M. (2009). Development of a creative arts therapies center for people with developmental disabilities. *Art Therapy*, 26(1), 34–37. <https://doi.org/10.1080/07421656.2009.10129316>

260. Liu, H., Song, M., Zhai, Z.-H., Shi, R.-J., & Zhou, X.-L. (2019). Group singing improves depression and life quality in patients with stable COPD: a randomized community-based trial in China. *Quality of Life Research: An International Journal of Quality of Life Aspects of Treatment, Care and Rehabilitation*, 28(3), 725–735. <https://doi.org/10.1007/s11136-018-2063-5>
261. Logie, C. H., Dias, L. V., Jenkinson, J., Newman, P. A., MacKenzie, R. K., Mothopeng, T., Madau, V., Ranotsi, A., Nhlengethwa, W., & Baral, S. D. (2019). Exploring the Potential of Participatory Theatre to Reduce Stigma and Promote Health Equity for Lesbian, Gay, Bisexual, and Transgender (LGBT) People in Swaziland and Lesotho. *Health Education & Behavior: The Official Publication of the Society for Public Health Education*, 46(1), 146–156. <https://doi.org/10.1177/1090198118760682>
262. Lopes-Júnior, L. C., Bomfim, E., Olson, K., Neves, E. T., Silveira, D. S. C., Nunes, M. D. R., Nascimento, L. C., Pereira-Da-Silva, G., & Lima, R. A. G. (2020). Effectiveness of hospital clowns for symptom management in paediatrics: Systematic review of randomised and non-randomised controlled trials. *The BMJ*, 371. <https://doi.org/10.1136/bmj.m4290>
263. Madden, J. R., Mowry, P., Gao, D., Cullen, P. M., & Foreman, N. K. (2010). Creative arts therapy improves quality of life for pediatric brain tumor patients receiving outpatient chemotherapy. *Journal of Pediatric Oncology Nursing: Official Journal of the Association of Pediatric Oncology Nurses*, 27(3), 133–145. <https://doi.org/10.1177/1043454209355452>
264. Mak, H. W., & Fancourt, D. (2020). Reading for pleasure in childhood and adolescent healthy behaviours: Longitudinal associations using the Millennium Cohort Study. *Preventive Medicine*, 130, 105889. <https://doi.org/10.1016/j.ypmed.2019.105889>
265. Mansky, R., Marzel, A., Orav, E. J., Chocano-Bedoya, P. O., Grünheid, P., Mattle, M., Freystätter, G., Stähelin, H. B., Egli, A., & Bischoff-Ferrari, H. A. (2020). Playing a musical instrument is associated with slower cognitive decline in community-dwelling older adults. *Aging Clinical and Experimental Research*, 32(8), 1577–1584. <https://doi.org/10.1007/s40520-020-01472-9>
266. Mar, R. A., Oatley, K., & Peterson, J. B. (2009). Exploring the link between reading fiction and empathy: Ruling out individual differences and examining outcomes. *Communications*, 34(4), 407–428. <https://doi.org/10.1515/COMM.2009.025>
267. Marquez, D. X., Wilson, R., Aguiñaga, S., Vásquez, P., Fogg, L., Yang, Z., Wilbur, J., Hughes, S., & Spanbauer, C. (2017). Regular Latin Dancing and Health Education May Improve Cognition of Late Middle-Aged and Older Latinos. *Journal of Aging and Physical Activity*, 25(3), 482–489. <https://doi.org/10.1123/japa.2016-0049>
268. Masters, R., Anwar, E., Collins, B., Cookson, R., Capewell, S. (2017). Return on investment of public health interventions: a systematic review. *Journal of Epidemiology and Community Health*, 71(8), 827–834. <https://doi.org/10.1136/jech-2016-208141>
269. Mazza, N. (2012). Poetry/creative writing for an arts and athletics community outreach program for at-risk youth. *Journal of Poetry Therapy*, 25(4), 225–231. <https://doi.org/10.1080/08893675.2012.738491>
270. McCay, L., Bremer, I., Endale, T., Jannati, M., & Yi, J. (2017). *Urban Design and Mental Health BT - Mental Health and Illness in the City* (N. Okkels, C. B. Kristiansen, & P. Munk-Jørgensen (Eds.); pp. 421–444). Springer Singapore. [https://doi.org/10.1007/978-981-10-2327-9\\_12](https://doi.org/10.1007/978-981-10-2327-9_12)
271. McKenzie, K., Murray, A., & Booth, T. (2013). Do urban environments increase the risk of anxiety, depression and psychosis? An epidemiological study. *Journal of Affective Disorders*, 150(3), 1019–1024. <https://doi.org/10.1016/j.jad.2013.05.032>
272. McNaughton, A., Aldington, S., Williams, G., & Levack, W. M. M. (2016). Sing Your Lungs Out: a qualitative study of a community singing group for people with chronic obstructive pulmonary disease (COPD). *BMJ Open*, 6(9), e012521. <https://doi.org/10.1136/bmjopen-2016-012521>
273. McNaughton, A., Weatherall, M., Williams, M., McNaughton, H., Aldington, S., Williams, G., & Beasley, R. (2017). Sing Your Lungs Out—a community singing group for chronic obstructive pulmonary disease: a 1-year pilot study. *BMJ Open*, 7(1), e014151. <https://doi.org/10.1136/bmjopen-2016-014151>
274. Meeks, S., Shryock, S. K., & Vandenbroucke, R. J. (2018). Theatre Involvement and Well-Being, Age Differences, and Lessons From Long-Time Subscribers. *The Gerontologist*, 58(2), 278–289. <https://doi.org/10.1093/geront/gnx029>
275. Meeks, S., Vandenbroucke, R. J., & Shryock, S. K. (2020). Psychological benefits of attending the theatre associated with positive affect and well-being for subscribers over age 60. *Aging & Mental Health*, 24(2), 333–340. <https://doi.org/10.1080/13607863.2018.1534082>
276. Michelen, M., Manoharan, L., Elkheir, N., Cheng, V., Dagens, A., Hastie, C., ... & Stavropoulou, C. (2021). Characterising long COVID: a living systematic review. *BMJ Global Health*, 6(9), e005427.
277. Milligan, E., & Woodley, E. (2009). Creative expressive encounters in health ethics education: teaching ethics as relational engagement. *Teaching and Learning in Medicine*, 21(2), 131–139. <https://doi.org/10.1080/10401330902791248>
278. Ministry of Education and Culture of Finland. (2016). Cultural Policy Promotes Arts and Culture. Retrieved from <https://okm.fi/documents/1410845/4150031/Cultural+policy+promotes+arts+and+culture/f0ef766e-e282-4819-b828-a9d-d5d515f52>
279. Mlinaric, A., Horvat, M., & Smolic, V. Š. (2017). Dealing with the positive publication bias: Why you should really publish your negative results. *Biochemia Medica*, 27(3), 30201. <https://doi.org/10.11613/BM.2017.030201>
280. Mondro, A., Connell, C. M., Li, L., & Reed, E. (2020). Retaining identity: Creativity and caregiving. *Dementia (London)*, 19(5), 1641–1656. <https://doi.org/10.1177/1471301218803468>



281. Moors, T., Silva, S., Maraschin, D., Young, D., Quinn, J. M., de Carpentier, J., Allouche, J., & Himonides, E. (2020). Using Beatboxing for Creative Rehabilitation After Laryngectomy: Experiences From a Public Engagement Project. *Frontiers in Psychology*, 10. <https://doi.org/10.3389/fpsyg.2019.02854>
282. Morse, K. F., Fine, P. A., & Friedlander, K. J. (2021). Creativity and Leisure During COVID-19: Examining the Relationship Between Leisure Activities, Motivations, and Psychological Well-Being. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.609967>
283. Moss, H., & O'Donoghue, J. (2020). An evaluation of workplace choir singing amongst Health Service staff in Ireland. *Health Promotion International*, 35(3), 527–534. <https://doi.org/10.1093/heapro/daz044>
284. Moss, H., Lynch, J., & O'Donoghue, J. (2018). Exploring the perceived health benefits of singing in a choir: an international cross-sectional mixed-methods study. *Perspectives in Public Health*, 138(3), 160–168. <https://doi.org/10.1177/1757913917739652>
285. Moula, Z. (2021). "I didn't know I have the capacity to be creative": children's experiences of how creativity promoted their sense of well-being. A pilot randomised controlled study in school arts therapies. *Public Health*, 197, 19–25. <https://doi.org/10.1016/j.puhe.2021.06.004>
286. Moula, Z., Palmer, K., & Walshe, N. (2022). A Systematic Review of Arts-Based Interventions Delivered to Children and Young People in Nature or Outdoor Spaces: Impact on Nature Connectedness, Health and Wellbeing. *Frontiers in Psychology*, 13, 833. <https://doi.org/10.3389/FPSYG.2022.858781/BIBTEX>
287. Murray, M., & Crummett, A. (2010). "I don't think they knew we could do these sorts of things": social representations of community and participation in community arts by older people. *Journal of Health Psychology*, 15(5), 777–785. <https://doi.org/10.1177/1359105310368069>
288. Nærland, T., Hovden, J. F., Moe, H. (2020). Enabling Cultural Policies? Culture, Capabilities, and Citizenship. *International Journal of Communication*, 14, 4055–4074. Retrieved from <https://ijoc.org/index.php/ijoc/article/view/12622/3170>
289. Nagji, A., Brett-MacLean, P., & Breault, L. (2013). Exploring the benefits of an optional theatre module on medical student well-being. *Teaching and Learning in Medicine*, 25(3), 201–206. <https://doi.org/10.1080/10401334.2013.801774>
290. Nelson, C. L. (2010). Meeting the needs of urban students: Creative arts therapy in Jersey City public schools. *Art Therapy*, 27(2), 62–68. <https://doi.org/10.1080/07421656.2010.10129711>
291. NHS. (2020). Social prescribing and community-based support: Summary guide. <https://www.england.nhs.uk/wp-content/uploads/2020/06/social-prescribing-summary-guide-updated-june-20.pdf>
292. NHS. (n.d.). Social Prescribing: Reducing Non-medical GP Appointments and Delivering a Better Service for Patients. Retrieved from <https://www.england.nhs.uk/gp/case-studies/social-prescribing-reducing-non-medical-gp-appointments-and-delivering-a-better-service-for-patients-brownlow-health-princes-park-health-centre-north-west/>
293. Nisker, J., Martin, D. K., Bluhm, R., & Daar, A. S. (2006). Theatre as a public engagement tool for health-policy development. *Health Policy (Amsterdam, Netherlands)*, 78(2–3), 258–271. <https://doi.org/10.1016/j.healthpol.2005.10.009>
294. Nowicka-Sauer, K. (2007). Patients' perspective: lupus in patients' drawings. Assessing drawing as a diagnostic and therapeutic method. *Clinical Rheumatology*, 26(9), 1523–1525. <https://doi.org/10.1007/s10067-007-0619-9>
295. Nussbaum, M. (2011). *Creating Capabilities*. Boston: Harvard University Press
296. OECD. (2018). *Health at a Glance: Europe*. Retrieved from [https://www.oecd-ilibrary.org/social-issues-migration-health/health-at-a-glance-europe-2018\\_health\\_glance\\_eur-2018-en](https://www.oecd-ilibrary.org/social-issues-migration-health/health-at-a-glance-europe-2018_health_glance_eur-2018-en)
297. OECD. (2019). *The Economy of Well-Being*. Retrieved from <https://www.oecd.org/about/secretary-general/the-economy-of-well-being-iceland-september-2019.htm>
298. Oman, S. (2021). *Understanding Well-being Data: Improving Social and Cultural Policy, Practice and Research of Well-being Data*. London: Palgrave Macmillan.
299. Omylinska-Thurston, J., Karkou, V., Parsons, A., Nair, K., Dubrow-Marshall, L., Starkey, J., Thurston, S., Dudley-Swarbrick, I., & Sharma, S. (2021). Arts for the Blues: The development of a new evidence-based creative group psychotherapy for depression. *Counselling and Psychotherapy Research*, 21(3), 597–607. <https://doi.org/10.1002/capr.12373>
300. Ørjasæter, K. B., & Ness, O. (2017). Acting Out: Enabling Meaningful Participation Among People with Long-Term Mental Health Problems in a Music and Theater Workshop. *Qualitative Health Research*, 27(11), 1600–1613. <https://doi.org/10.1177/1049732316679954>
301. Ørjasæter, K. B., Stickle, T., Hedlund, M., & Ness, O. (2017). Transforming identity through participation in music and theatre: exploring narratives of people with mental health problems. *International Journal of Qualitative Studies on Health and Well-Being*, 12(sup2), 1379339. <https://doi.org/10.1080/17482631.2017.1379339>
302. Osman, S. E., Tischler, V., & Schneider, J. (2016). "Singing for the Brain": A qualitative study exploring the health and well-being benefits of singing for people with dementia and their carers. *Dementia (London)*, 15(6), 1326–1339. <https://doi.org/10.1177/1471301214556291>
303. Palazzi, A., Filippa, M., Meschini, R., & Piccinini, C. A. (2021). Music therapy enhances preterm infant's signs of engagement

- and sustains maternal singing in the NICU. *Infant Behavior & Development*, 64, 101596. <https://doi.org/10.1016/j.inf-beh.2021.101596>
304. Pearce, R., & Lillyman, S. (2015). Reducing social isolation in a rural community through participation in creative arts projects. *Nursing Older People*, 27(10), 33–38. <https://doi.org/10.7748/nop.27.10.33.s22>
305. Pellicciari, A., Rossi, F., Iero, L., DiPietro, E., Verrotti, A., & Franzoni, E. (2013). Drama therapy and eating disorders: a historical perspective and an overview of a Bolognese project for adolescents. *Journal of Alternative and Complementary Medicine*, 19(7), 607–612. <https://doi.org/10.1089/acm.2011.0623>
306. Pennington, A., Jones, R., Bagnall, A.-M., South, J., & Corcoran, R. (2019). Heritage and well-being: The impact of historic places and assets on community wellbeing - a scoping review. <https://doi.org/10.4324/9781315724966-12>
307. Pentikäinen, E., Pitkäniemi, A., Siponkoski, S.-T., Jansson, M., Louhivuori, J., Johnson, J. K., Pajanen, T., & Särkämö, T. (2021). Beneficial effects of choir singing on cognition and well-being of older adults: Evidence from a cross-sectional study. *PloS One*, 16(2), e0245666. <https://doi.org/10.1371/journal.pone.0245666>
308. Pérez-Sáez, E., Cabrero-Montes, E. M., Llorente-Cano, M., & González-Ingelmo, E. (2020). A pilot study on the impact of a pottery workshop on the well-being of people with dementia. *Dementia (London)*, 19(6), 2056–2072. <https://doi.org/10.1177/1471301218814634>
309. Peters M. D. J., Godfrey C. M., McInerney, Khalil H., Parker, D., and Baldini Soares, C. (2015) Guidance for conducting systematic scoping reviews. *International Journal of Evidence-based Healthcare*. 13(3):141-146. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/26134548>
310. Peters, M. D. J., Marnie, C., Colquhoun, H., Garritty, C. M., Hempel, S., Horsley, T., Langlois, E. V., Lillie, E., O'Brien, K. K., Tunçalp, Zge, Wilson, M. G., Zarin, W., & Tricco, A. C. (2021). Scoping reviews: reinforcing and advancing the methodology and application. *Systematic Reviews*, 10(1), 1–6. <https://doi.org/10.1186/S13643-021-01821-3/PEER-REVIEW>
311. Petrovsky, D. V., Sefcik, J. S., & Cacchione, P. Z. (2020). A Qualitative Exploration of Choral Singing in Community-dwelling Older Adults. *Western Journal of Nursing Research*, 42(5), 340–347. <https://doi.org/10.1177/0193945919861380>
312. Philip, K. E., Lewis, A., BATTERY, S. C., McCabe, C., Manivannan, B., Fancourt, D., Orton, C. M., Polkey, M. I., & Hopkinson, N. S. (2021). Physiological demands of singing for lung health compared with treadmill walking. *BMJ Open Respiratory Research*, 8(1). <https://doi.org/10.1136/bmjresp-2021-000959>
313. Philip, K. E., Lewis, A., Jeffery, E., BATTERY, S., Cave, P., Cristiano, D., Lound, A., Taylor, K., Man, W. D.-C., Fancourt, D., Polkey, M. I., & Hopkinson, N. S. (2020). Moving singing for lung health online in response to COVID-19: experience from a randomised controlled trial. *BMJ Open Respiratory Research*, 7(1). <https://doi.org/10.1136/bmjresp-2020-000737>
314. Philipp, R., Gibbons, N., Thorne, P., Wiltshire, L., Burrough, J., & Easterby, J. (2015). Evaluation of a community arts installation event in support of public health. *Perspectives in Public Health*, 135(1), 43–48. <https://doi.org/10.1177/1757913914548155>
315. Phillips, L. J., Reid-Arndt, S. A., & Pak, Y. (2010). Effects of a creative expression intervention on emotions, communication, and quality of life in persons with dementia. *Nursing Research*, 59(6), 417–425. <https://doi.org/10.1097/NNR.0b013e-3181faff52>
316. Pongan, E., Tillmann, B., Leveque, Y., Trombert, B., Getenet, J. C., Auguste, N., Dauphinot, V., El Haouari, H., Navez, M., Dorey, J.-M., Krolak-Salmon, P., Laurent, B., & Rouch, I. (2017). Can Musical or Painting Interventions Improve Chronic Pain, Mood, Quality of Life, and Cognition in Patients with Mild Alzheimer's Disease? Evidence from a Randomized Controlled Trial. *Journal of Alzheimer's Disease: JAD*, 60(2), 663–677. <https://doi.org/10.3233/JAD-170410>
317. Puetz, T. W., Morley, C. A., & Herring, M. P. (2013). Effects of creative arts therapies on psychological symptoms and quality of life in patients with cancer. *JAMA Internal Medicine*, 173(11), 960–969. <https://doi.org/10.1001/jamainternmed.2013.836>
318. Purser, A. (2019). Dancing Intercorporeality: A Health Humanities Perspective on Dance as a Healing Art. *The Journal of Medical Humanities*, 40(2), 253–263. <https://doi.org/10.1007/s10912-017-9502-0>
319. Qin, Y. (2020). Effect of Music Therapy Intervention on Physical Functions and Mental Health of Patients with Ankylosing Spondylitis. *Psychiatria Danubina*, 32(3–4), 403–410. <https://doi.org/10.24869/psyd.2020.403>
320. Rautio, N., Filatova, S., Lehtiniemi, H., & Miettunen, J. (2018). Living environment and its relationship to depressive mood: a systematic review. *International journal of Social Psychiatry*, 64(1), 92–103.
321. Reagon, C., Gale, N., Enright, S., Mann, M., & van Deursen, R. (2016). A mixed-method systematic review to investigate the effect of group singing on health related quality of life. *Complementary Therapies in Medicine*, 27, 1–11. <https://doi.org/10.1016/j.ctim.2016.03.017>
322. Redmond, M., Sumner, R. C., Crone, D. M., & Hughes, S. (2019). "Light in dark places": exploring qualitative data from a longitudinal study using creative arts as a form of social prescribing. *Arts & Health*, 11(3), 232–245. <https://doi.org/10.1080/17533015.2018.1490786>
323. Reynolds, F., Vivat, B., & Prior, S. (2008). Women's experiences of increasing subjective well-being in CFS/ME through leisure-based arts and crafts activities: a qualitative study. *Disability and Rehabilitation*, 30(17), 1279–1288. <https://doi.org/10.1080/09638280701654518>



324. Richardson, W. S., Wilson, M. C., Nishikawa, J., & Hayward, R. S. (1995). The well-built clinical question: a key to evidence-based decisions. *ACP Journal Club*, 123(3). <https://doi.org/10.7326/ACPJC-1995-123-3-A12>
325. RICS. (2021). Governance of Participatory Planning for Resilient Communities. London: RICS Research Trust. Retrieved from <https://www.rics.org/uk/news-insight/research/research-reports/governance-of-participatory-planning-for-resilient-communities/>
326. Ritter, S. M., & Ferguson, S. (2017). Happy creativity: Listening to happy music facilitates divergent thinking. *PloS One*, 12(9), e0182210. <https://doi.org/10.1371/journal.pone.0182210>
327. Roberts, M., Lobo, R., & Sorenson, A. (2017). Evaluating the Sharing Stories youth theatre program: an interactive theatre and drama-based strategy for sexual health promotion among multicultural youth. *Health Promotion Journal of Australia*, 28(1), 30–36. <https://doi.org/10.1071/HE15096>
328. Rodgers, L., & Furcron, C. (2016). The Dynamic Interface Between Neuromaturation, Risky Behavior, Creative Dance Movement, and Youth Development Programming. *American Journal of Dance Therapy*, 38(1), 3–20. <https://doi.org/10.1007/s10465-016-9216-2>
329. Rodríguez, J. E., Welch, T. J., & Edwards, J. C. (2012). Impact of a creative arts journal on a medical school community: A qualitative study. *Journal of Poetry Therapy*, 25(4), 197–204. <https://doi.org/10.1080/08893675.2012.736179>
330. Rodriguez, J. E., Welch, T. J., Saunders, C., & Edwards, J. C. (2013). Students' perceptions of the impact a creative arts journal has on their medical education. *Family Medicine*, 45(8), 569–571.
331. Romeiser, J. L., Smith, D. M., & Clouston, S. A. P. (2021). Musical instrument engagement across the life course and episodic memory in late life: An analysis of 60 years of longitudinal data from the Wisconsin Longitudinal Study. *PloS One*, 16(6), e0253053. <https://doi.org/10.1371/journal.pone.0253053>
332. Rose, E., & Lonsdale, S. (2016). Painting place: Re-imagining landscapes for older people's subjective wellbeing. *Health & Place*, 40, 58–65. <https://doi.org/10.1016/j.healthplace.2016.05.002>
333. Rosenberg, F. (2009). The MoMA Alzheimer's Project: Programming and resources for making art accessible to people with Alzheimer's disease and their caregivers. *Arts & Health*, 1(1), 93–97. <https://doi.org/10.1080/17533010802528108>
334. Rousseau, C., Beaugard, C., Daignault, K., Petrakos, H., Thombs, B. D., Steele, R., Vasiliadis, H.-M., & Hechtman, L. (2014). A cluster randomized-controlled trial of a classroom-based drama workshop program to improve mental health outcomes among immigrant and refugee youth in special classes. *PloS One*, 9(8), e104704. <https://doi.org/10.1371/journal.pone.0104704>
335. Rubin, C. L., Chomitz, V. R., Woo, C., Li, G., Koch-Weser, S., & Levine, P. (2021). Arts, Culture, and Creativity as a Strategy for Countering the Negative Social Impacts of Immigration Stress and Gentrification. *Health Promotion Practice*, 22(1\_suppl), 131S–140S. <https://doi.org/10.1177/1524839921996336>
336. Ruger, J. (2010). Health Capability: Conceptualization and Operationalization. *American Journal of Public Health*, 100(1), 41–49. <https://doi.org/10.2105/AJPH.2008.143651>
337. Saavedra, J., Pérez, E., Crawford, P., & Arias, S. (2018). Recovery and creative practices in people with severe mental illness: evaluating well-being and social inclusion. *Disability and Rehabilitation*, 40(8), 905–911. <https://doi.org/10.1080/09638288.2017.1278797>
338. Sclater, M., & Lally, V. (2013). Virtual voices: Exploring creative practices to support life skills development among young people working in a virtual world community. *International Journal of Art and Design Education*, 32(3), 331–344. <https://doi.org/10.1111/j.1476-8070.2013.12024.x>
339. Sen, A. (1992) *Inequality Reexamined*. Cambridge, MA: Harvard University Press.
340. Serpa, S., & Ferreira, C. M. (2019). Micro, Meso and Macro Levels of Social Analysis. *International Journal of Social Science Studies*, 7(3), 120. <https://doi.org/10.11114/IJSSS.V7I3.4223>
341. Seymour, K., & Wise, P. (2017). Circus training for autistic children: Difference, creativity, and community. *New Theatre Quarterly*, 33(1), 78–90. <https://doi.org/10.1017/S0266464X16000658>
342. Shakespeare, T., & Whieldon, A. (2018). Sing Your Heart Out: community singing as part of mental health recovery. *Medical Humanities*, 44(3), 153–157. <https://doi.org/10.1136/medhum-2017-011195>
343. Shibasaki, K., & Marshall, N. A. (2017). Exploring the impact of music concerts in promoting well-being in dementia care. *Aging & Mental Health*, 21(5), 468–476. <https://doi.org/10.1080/13607863.2015.1114589>
344. Shik, A. W. Y. (2013). Integrating creative art into a community-based mental health program for Asian American transition age youth. *Children and Youth Services Review*, 35(3), 377–383. <https://doi.org/10.1016/j.childyouth.2012.12.002>
345. Shuber, C., & Kok, A. (2020). Hospice Photography's Effects on Patients, Families, and Social Work Practice. *Journal of Social Work in End-of-Life & Palliative Care*, 16(1), 19–41. <https://doi.org/10.1080/15524256.2019.1703876>
346. Silva, C. R., Silvestrini, M. S., Von Poellnitz, J. C., Da Silva Almeida Prado, A. C., & Junior, J. D. L. (2018). Creative strategies and homeless people: Occupational therapy, art, culture and sensitive displacement. *Brazilian Journal of Occupational Therapy*, 26(2), 489–500. <https://doi.org/10.4322/2526-8910.ctoRE1128>

347. Sit, J. W. H., Chan, A. W. H., So, W. K. W., Chan, C. W. H., Chan, A. W. K., Chan, H. Y. L., Fung, O. W. M., & Wong, E. M. L. (2017). Promoting Holistic Well-Being in Chronic Stroke Patients Through Leisure Art-Based Creative Engagement. *Rehabilitation Nursing: The Official Journal of the Association of Rehabilitation Nurses*, 42(2), 58–66. <https://doi.org/10.1002/rnj.177>
348. Sitvast, J. E., & Springer, W. (2020). The use of photography in perceiving a sense in life: A phenomenological and existential approach in Mental Health Care. *Nursing Philosophy: An International Journal for Healthcare Professionals*, 21(2), e12287. <https://doi.org/10.1111/nup.12287>
349. Skingley, A., & Bungay, H. (2010). The Silver Song Club Project: singing to promote the health of older people. *British Journal of Community Nursing*, 15(3), 135–140. <https://doi.org/10.12968/bjcn.2010.15.3.46902>
350. Skingley, A., Clift, S., Hurley, S., Price, S., & Stephens, L. (2018). Community singing groups for people with chronic obstructive pulmonary disease: participant perspectives. *Perspectives in Public Health*, 138(1), 66–75. <https://doi.org/10.1177/1757913917740930>
351. Skingley, A., Martin, A., & Clift, S. (2016). The Contribution of Community Singing Groups to the Well-Being of Older People: Participant Perspectives from the United Kingdom. *Journal of Applied Gerontology: The Official Journal of the Southern Gerontological Society*, 35(12), 1302–1324. <https://doi.org/10.1177/0733464815577141>
352. Slattery, M., Attard, H., Stewart, V., Roennfeldt, H., & Wheeler, A. J. (2020). Participation in creative workshops supports mental health consumers to share their stories of recovery: A one-year qualitative follow-up study. *PloS One*, 15(12), e0243284. <https://doi.org/10.1371/journal.pone.0243284>
353. Smit, S., Tacke, T., Lund, M. S., Manyika, J., Thiel, L. (2020). The Future of Work in Europe: Automation, Workforce Transitions, and the Shifting Geography of Employment. McKinsey Global Institute. Retrieved from <https://www.mckinsey.com/-/media/mckinsey/featured%20insights/future%20of%20organizations/the%20future%20of%20work%20in%20europe/mgi-the-future-of-work-in-europe-discussion-paper.pdf>
354. Sonn, C. C., Quayle, A. F., & Kasat, P. (2015). Picturing the Wheatbelt: exploring and expressing place identity through photography. *American Journal of Community Psychology*, 55(1–2), 89–101. <https://doi.org/10.1007/s10464-014-9686-7>
355. Spencer, J., Alwani, R., Raby, E., Bichard, J.-A., & West, J. (2019). An inclusive design approach to community wellbeing: a case study of architectural interventions in Derry/Londonderry. In M. Jones, L. Rice, & F. Meraz (Eds.), *Designing for Health & Wellbeing: Home, City, Society* (pp. 205–218). Retrieved from [https://www.google.co.uk/books/edition/Designing\\_for\\_Health\\_Wellbeing\\_Home\\_City/1heVDwAAQBAJ?q=&gbpv=1#f=false](https://www.google.co.uk/books/edition/Designing_for_Health_Wellbeing_Home_City/1heVDwAAQBAJ?q=&gbpv=1#f=false)
356. Sridharan, K., & Sivaramakrishnan, G. (2016). Therapeutic clowns in pediatrics: a systematic review and meta-analysis of randomized controlled trials. *European Journal of Pediatrics*, 175(10), 1353–1360. <https://doi.org/10.1007/s00431-016-2764-0>
357. Stanhope, J., & Weinstein, P. (2020). The human health effects of singing bowls: A systematic review. *Complementary Therapies in Medicine*, 51, 102412. <https://doi.org/10.1016/j.ctim.2020.102412>
358. Statista. (2022). Share of People Who Experienced or Felt on the Verge of Burnout Europe in 2021, by Country. Retrieved from <https://www.statista.com/statistics/1249649/experiences-of-burnout-in-europe>
359. Stegemöller, E. L., Radig, H., Hibbing, P., Wingate, J., & Sapienza, C. (2017). Effects of singing on voice, respiratory control and quality of life in persons with Parkinson's disease. *Disability and Rehabilitation*, 39(6), 594–600. <https://doi.org/10.3109/09638288.2016.1152610>
360. Stenhouse, R., Tait, J., Hardy, P., & Sumner, T. (2013). Dangling conversations: reflections on the process of creating digital stories during a workshop with people with early-stage dementia. *Journal of Psychiatric and Mental Health Nursing*, 20(2), 134–141. <https://doi.org/10.1111/j.1365-2850.2012.01900.x>
361. Stockwell, R. (2016). Creative play: Welcoming students into a community of practice in creative writing through a participatory action research project. *New Writing*, 13(2), 261–272. <https://doi.org/10.1080/14790726.2016.1142569>
362. Suh, E. E., Ahn, J., Kang, J., & Seok, Y. (2021). The Development and Application of Drama-Combined Nursing Educational Content for Cancer Care. *International Journal of Environmental Research and Public Health*, 18(18). <https://doi.org/10.3390/ijerph18189891>
363. Sun, J., & Buys, N. (2016). Effects of Community Singing Program on Mental Health Outcomes of Australian Aboriginal and Torres Strait Islander People: A Meditative Approach. *American Journal of Health Promotion: AJHP*, 30(4), 259–263. <https://doi.org/10.1177/0890117116639573>
364. Swe, M. M. M., Hlaing, P. H., Phyo, A. P., Aung, H. H., Smithuis, F., Ashley, E. A., & Cheah, P. Y. (2020). Evaluation of the forum theatre approach for public engagement around antibiotic use in Myanmar. *PloS One*, 15(7), e0235625. <https://doi.org/10.1371/journal.pone.0235625>
365. Ta Park, V. M., Suen Diwata, J., Win, N., Ton, V., Nam, B., Rajabally, W., & Jones, V. C. (2020). Promising Results from the Use of a Korean Drama to Address Knowledge, Attitudes, and Behaviors on School Bullying and Mental Health among Asian American College-Aged Students. *International Journal of Environmental Research and Public Health*, 17(5). <https://doi.org/10.3390/ijerph17051637>
366. Tamplin, J., Baker, F. A., Grocke, D., Brazzale, D. J., Pretto, J. J., Ruehland, W. R., Buttifant, M., Brown, D. J., & Berlowitz, D.

- J. (2013a). Effect of singing on respiratory function, voice, and mood after quadriplegia: a randomized controlled trial. *Archives of Physical Medicine and Rehabilitation*, 94(3), 426–434. <https://doi.org/10.1016/j.apmr.2012.10.006>
367. Tamplin, J., Baker, F. A., Jones, B., Way, A., & Lee, S. (2013b). "Stroke a Chord": the effect of singing in a community choir on mood and social engagement for people living with aphasia following a stroke. *NeuroRehabilitation*, 32(4), 929–941. <https://doi.org/10.3233/NRE-130916>
368. Tan, M. K. B., & Tan, C. M. (2021). Curating wellness during a pandemic in Singapore: COVID-19, museums, and digital imagination. *Public Health*, 192, 68–71. <https://doi.org/10.1016/j.puhe.2021.01.006>
369. Tavormina, R., & Tavormina, M. G. M. (2017). Overcoming the Social Stigma on Mood Disorders with Dancing. *Psychiatria Danubina*, 29(Suppl 3), 427–431.
370. Taylor, A. (2022). Suicide Increasing Amongst Europe's Youth, Governments Underprepared. Retrieved from <https://www.euractiv.com/section/coronavirus/news/suicide-increasing-amongst-europes-youth-governments-underprepared/>
371. Teksoz, E., Bilgin, I., Madzwamuse, S. E., & Oscakci, A. F. (2017). The impact of a creative play intervention on satisfaction with nursing care: A mixed-methods study. *Journal for Specialists in Pediatric Nursing*, 22(1). <https://doi.org/10.1111/jspn.12169>
372. Thieser, S., Dörfler, J., Rudolph, I., Wozniak, T., Schmidt, T., & Hübner, J. (2021). Influence of ballroom dancing on fatigue, body image, self-efficacy, and endurance of cancer patients and their partners. *Medical Oncology (Northwood, London, England)*, 38(2), 15. <https://doi.org/10.1007/s12032-021-01459-0>
373. Thom, L. (2010). From Simple Line to Expressive Movement: The Use of Creative Movement to Enhance Socio-Emotional Development in the Preschool Curriculum. *American Journal of Dance Therapy*, 32(2), 100–112. <https://doi.org/10.1007/s10465-010-9090-2>
374. Thompson, I., & Tawell, A. (2017). Becoming other: social and emotional development through the creative arts for young people with behavioural difficulties. *Emotional and Behavioural Difficulties*, 22(1), 18–34. <https://doi.org/10.1080/13632752.2017.1287342>
375. Thompson, T., & Kreuter, M. W. (2014). Using written narratives in public health practice: a creative writing perspective. *Preventing Chronic Disease*, 11, E94. <https://doi.org/10.5888/pcd11.130402>
376. Thomson, L. J., Morse, N., Elsdon, E., & Chatterjee, H. J. (2020). Art, nature and mental health: assessing the biopsychosocial effects of a "creative green prescription" museum programme involving horticulture, artmaking and collections. *Perspectives in Public Health*, 140(5), 277–285. <https://doi.org/10.1177/1757913920910443>
377. Torrente M., Sousa, P., Sánchez-Ramos, A., Pimentao, J., Royuela, A., Franco, F., Collazo-Lorduy, A., Menasalvas, E., Provençio, M., (2021). To burn-out or not to burn-out: a cross-sectional study in healthcare professionals in Spain during COVID-19 pandemic. *BMJ Open* 2021; 11: e044945. <https://doi.org/10.1136/bmjopen-2020-044945>
378. Tricco, A. C., Lillie, E., Zarin, W., O'Brien, K. K., Colquhoun, H., Levac, D.,... & Straus, S. E. (2018). PRISMA extension for scoping reviews (PRISMA-ScR): checklist and explanation. *Annals of Internal Medicine*, 169(7), 467–473. <https://doi.org/10.7326/M18-0850>
379. UK Health and Security Agency. (2016). Investing in Prevention: is it Cost-effective? Retrieved from <https://ukhsa.blog.gov.uk/2016/02/29/investing-in-prevention-is-it-cost-effective/>
380. UN General Assembly. (2015). Transforming our World: the 2030 Agenda for Sustainable Development. A/RES/70/1. <https://www.refworld.org/docid/57b6e3e44.html>
381. UNESCO. (2005). The Convention on the Protection and Promotion of the Diversity of Cultural Expressions | Diversity of Cultural Expressions. Retrieved from <https://en.unesco.org/creativity/convention>
382. UNICEF. (2021). The State of the World's Children 2021. On my Mind. Promoting, Protecting and Caring for Children's Mental Health. Retrieved from <https://www.unicef.org/media/108121/file/SOWC-2021-Europe-regional-brief.pdf>
383. Utveckling Skåne. (2022). Hela människan, hela livet – Region Skånes strategi för kultur och hälsa 2022–2030. Retrieved from <https://utveckling.skane.se/publikationer/strategier-och-planer/region-skanes-strategi-for-kultur-och-halsa-2022-2030/>
384. Vaiouli, P., Grimmet, K., & Ruich, L. J. (2015). "Bill is now singing": joint engagement and the emergence of social communication of three young children with autism. *Autism: The International Journal of Research and Practice*, 19(1), 73–83. <https://doi.org/10.1177/1362361313511709>
385. van Dijk, A. M., van Weert, J. C. M., & Dröes, R.-M. (2012). Does theatre improve the quality of life of people with dementia? *International Psychogeriatrics*, 24(3), 367–381. <https://doi.org/10.1017/S1041610211001992>
386. Vanelli, M., Munari, A., Fabbri, D., Iovane, B., Scarabello, C., Dodi, I., Mastroianni, C., Fainardi, V., Di Mauro, D., & Caffarelli, C. (2018). Could infantile interactive drawing technique be useful to promote the communication between children with Type-1 diabetes and pediatric team? *Acta Bio-Medica: Atenei Parmensis*, 89(2), 233–241. <https://doi.org/10.23750/abm.v89i2.7172>
387. Visser, A., & Op 't Hoog, M. (2008). Education of creative art therapy to cancer patients: evaluation and effects. *Journal*

- of Cancer Education: The Official Journal of the American Association for Cancer Education, 23(2), 80–84. <https://doi.org/10.1080/08858190701821204>
388. Vitalaki, E., Kourkoutas, E., & Hart, A. (2018). Building inclusion and resilience in students with and without SEN through the implementation of narrative speech, role play and creative writing in the mainstream classroom of primary education. *International Journal of Inclusive Education*, 22(12), 1306–1319. <https://doi.org/10.1080/13603116.2018.1427150>
389. Waddington-Jones, C., King, A., & Burnard, P. (2019). Exploring wellbeing and creativity through collaborative composition as part of hull 2017 city of culture. *Frontiers in Psychology*, 10(MAR). <https://doi.org/10.3389/fpsyg.2019.00548>
390. Warran, K. (2019). Social integration and social inequality at the Edinburgh Festival Fringe. In *Conference Proceedings for the European Congress of Qualitative Inquiry (2019th ed., pp. 262–273)*. KU Leuven. Retrieved from [https://www.academia.edu/44115393/ECQI\\_2019\\_Proceedings\\_European\\_Congress\\_of\\_Qualitative\\_Inquiry\\_Qualitative\\_Inquiry\\_as\\_Activism](https://www.academia.edu/44115393/ECQI_2019_Proceedings_European_Congress_of_Qualitative_Inquiry_Qualitative_Inquiry_as_Activism)
391. Warran, K., & Frederick Welch, G. (2019). Sounding Out View Project European Music Portfolio: Sounding Ways into Mathematics (EMP-M) In "FROM BINGO TO BARTOK" \* Creative and Innovative Approaches to Involving Older People with Orchestras. Retrieved from <https://cityoflondonsinfonia.co.uk/files/926fa098df993ac6b207911368bba39f.pdf>
392. Warran, K., Burton, A., & Fancourt, D. (2022). What are the active ingredients of 'arts in health' activities? Development of the INgredients iN ArTs in hEalth (INNATE) Framework. *Wellcome Open Research*, 7(May), 10. <https://doi.org/10.12688/wellcomeopenres.17414.1>
393. Wasmuth, S., Pritchard, K., Milton, C., & Smith, E. (2020). A Mixed-method Analysis of Community-Engaged Theatre Illuminates Black Women's Experiences of Racism and Addresses Healthcare Inequities by Targeting Provider Bias. *Inquiry: A Journal of Medical Care Organization, Provision and Financing*, 57, 46958020976255. <https://doi.org/10.1177/0046958020976255>
394. WEF. (2019). 5 things you need to know about creativity. <https://www.weforum.org/agenda/2019/04/5-things-you-need-to-know-about-creativity/>
395. Wenger, E. (1998). *Communities of Practice: Learning, Meaning, and Identity*. Cambridge: Cambridge University Press.
396. Wenger, E. (2009) *Social learning capability: four essays on innovation and learning in social systems*. Social Innovation, Sociedade e Trabalho booklets. Lisbon: MTSS/GEP & EQUAL.
397. Weziak-Bialowolska, D. (2016). Attendance of cultural events and involvement with the arts-impact evaluation on health and well-being from a Swiss household panel survey. *Public Health*, 139, 161–169. <https://doi.org/10.1016/j.puhe.2016.06.028>
398. Weziak-Bialowolska, Dorota, & Bialowski, P. (2016). Cultural events - does attendance improve health? Evidence from a Polish longitudinal study. *BMC Public Health*, 16, 730. <https://doi.org/10.1186/s12889-016-3433-y>
399. WhatWorksWellbeing. (2020) What works to improve wellbeing across different interventions: looking at ONS personal wellbeing findings in impact evaluations. Retrieved from <https://whatworkswellbeing.org/resources/ons-personal-wellbeing-findings-in-impact-evaluations/>
400. Wheeler, B. (2018). Non-prescribed spaces, creativity and narrative formation: a systems-based examination of a community art group exploring food poverty. *Ethnography and Education*, 13(3), 359–376. <https://doi.org/10.1080/17457823.2017.1422132>
401. White, M. and Salamon, E. (2010). An interim evaluation of the 'Arts For Well-being' social prescribing scheme in County Durham. Retrieved from <https://www.artsandhealth.ie/wp-content/uploads/2011/08/ArtsForWell-beingevaluation-FINAL.pdf>
402. WHO (2022b). A toolkit on how to implement social prescribing. Retrieved from <https://www.who.int/publications/i/item/9789290619765>
403. WHO. (1947). Constitution of the World Health Organization. Retrieved from <https://apps.who.int/gb/bd/PDF/bd47/EN/constitution-en.pdf?ua=1>
404. WHO. (1986). Ottawa Charter for Health Promotion. Retrieved from [https://www.euro.who.int/\\_data/assets/pdf\\_file/0004/129532/Ottawa\\_Charter.pdf](https://www.euro.who.int/_data/assets/pdf_file/0004/129532/Ottawa_Charter.pdf)
405. WHO. (2012) *Social Determinants of Health and Well-Being Among Young People. Health Behaviour in School-Aged Children (HBSC). Study: International Report from the 2009/2010 Study*. Retrieved from [https://www.euro.who.int/\\_data/assets/pdf\\_file/0003/163857/Social-determinants-of-health-and-well-being-among-young-people.pdf](https://www.euro.who.int/_data/assets/pdf_file/0003/163857/Social-determinants-of-health-and-well-being-among-young-people.pdf).
406. WHO. (2015). *World Report on Ageing and Health*. World Health Organization. Retrieved from <https://apps.who.int/iris/handle/10665/186463>
407. WHO. (2016a). Investing in Treatment for Depression and Anxiety Leads to Fourfold Return. Retrieved from <https://www.who.int/news/item/13-04-2016-investing-in-treatment-for-depression-and-anxiety-leads-to-fourfold-return>
408. WHO. (2016b). Discussion Paper on Economics and Health Inequalities. Retrieved from [https://www.euro.who.int/\\_data/assets/pdf\\_file/0004/315346/Discussion-paper-economics-health-inequalities.pdf](https://www.euro.who.int/_data/assets/pdf_file/0004/315346/Discussion-paper-economics-health-inequalities.pdf)
409. WHO. (2016c). *Social Determinants of Health and Well-being among Young People*. Retrieved from [https://www.euro.who.int/\\_data/assets/pdf\\_file/0003/163857/Social-determinants-of-health-and-well-being-among-young-people.pdf](https://www.euro.who.int/_data/assets/pdf_file/0003/163857/Social-determinants-of-health-and-well-being-among-young-people.pdf)

410. WHO. (2019a). Healthy, Prosperous Lives for All: the European Health Equity Status Report Executive Summary. Retrieved from <https://apps.who.int/iris/bitstream/handle/10665/346044/WHO-EURO-2019-3536-43295-60680-eng.pdf?sequence=1&isAllowed=y>
411. WHO. (2019b). Political Symposium on the Arts and Health in the Nordic Region: State of the Evidence: Copenhagen, Denmark, 22 March 2019. Retrieved from <https://apps.who.int/iris/handle/10665/346086>
412. WHO. (2019c). The WHO European Health Equity Status Report Initiative: Case Studies. Retrieved from <https://apps.who.int/iris/handle/10665/346050>
413. WHO. (2021). Geneva Charter on Health Promotion for Well-being. Retrieved from [https://cdn.who.int/media/docs/default-source/health-promotion/geneva-charter-4-march-2022.pdf?sfvrsn=f55dec7\\_21&download=true](https://cdn.who.int/media/docs/default-source/health-promotion/geneva-charter-4-march-2022.pdf?sfvrsn=f55dec7_21&download=true)
414. WHO. (2022a). Arts and Health: Supporting the Mental Well-being of Forcibly Displaced People. Retrieved from <https://www.who.int/europe/publications/m/item/arts-and-health--supporting-the-mental-well-being-of-forcibly-displaced-people>
415. WHO. (2022c). WHO European Framework for Action on Mental Health 2021–2025. Retrieved from <https://www.who.int/europe/publications/i/item/9789289057813>
416. WHO. (n.d.). Social Determinants of Health. [https://www.who.int/health-topics/social-determinants-of-health#tab=tab\\_1](https://www.who.int/health-topics/social-determinants-of-health#tab=tab_1)
417. Williams, E., Dingle, G. A., & Clift, S. (2018). A systematic review of mental health and wellbeing outcomes of group singing for adults with a mental health condition. *European Journal of Public Health*, 28(6), 1035–1042. <https://doi.org/10.1093/eurpub/cky115>
418. Wilson, N. C., Gross, J. D., & Bull, A. L. (2017). *Towards Cultural Democracy: Promoting Cultural Capabilities for Everyone*. London: Cultural Institute, King's College
419. Winther, H., Grøntved, S. N., Kold Gravesen, E., & Ilkjær, I. (2015). The Dancing Nurses and the Language of the Body: Training Somatic Awareness, Bodily Communication, and Embodied Professional Competence in Nurse Education. *Journal of Holistic Nursing: Official Journal of the American Holistic Nurses' Association*, 33(3), 182–184. <https://doi.org/10.1177/0898010114561063>
420. Withers, J. W., Muzzolon, S. B., & Zonta, M. B. (2019). Influence of adapted hip-hop dancing on quality of life and social participation among children/adolescents with cerebral palsy. *Arquivos de Neuro-Psiquiatria*, 77(10), 712–722. <https://doi.org/10.1590/0004-282X20190124>
421. World Happiness Report. (2021). *World Happiness Report 2021*. Retrieved from <https://worldhappiness.report/ed/2021/>
422. Wulff, V., Hepp, P., Wolf, O. T., Balan, P., Hagenbeck, C., Fehm, T., & Schaal, N. K. (2021b). The effects of a music and singing intervention during pregnancy on maternal well-being and mother-infant bonding: a randomised, controlled study. *Archives of Gynecology and Obstetrics*, 303(1), 69–83. <https://doi.org/10.1007/s00404-020-05727-8>
423. Wulff, V., Hepp, P., Wolf, O. T., Fehm, T., & Schaal, N. K. (2021a). The influence of maternal singing on well-being, postpartum depression and bonding – a randomised, controlled trial. *BMC Pregnancy and Childbirth*, 21(1), 501. <https://doi.org/10.1186/s12884-021-03933-z>
424. Xie, E., Yin, Q., Li, K., Nastase, S. A., Zhang, R., Wang, N., & Li, X. (2021). Sharing Happy Stories Increases Interpersonal Closeness: Interpersonal Brain Synchronization as a Neural Indicator. *ENeuro*, 8(6). <https://doi.org/10.1523/ENEURO.0245-21.2021>
425. Xiu, D., He, L., Killikelly, C., & Maercker, A. (2020). Prolonged Grief Disorder and Positive Affect Improved by Chinese Brush Painting Group in Bereaved Parents: A Pilot Study. *Journal of Social Work in End-of-Life & Palliative Care*, 16(2), 116–132. <https://doi.org/10.1080/15524256.2020.1749923>
426. Young, A., Ferrarini, L., Irving, A., Storbeck, C., Swannack, R., Tomkins, A., & Wilson, S. (2019). “The world is full of magic things, patiently waiting for our senses to grow sharper” (WB Yeats): enhancing resilience among deaf young people in South Africa through photography and filmmaking. *Medical Humanities*, 45(4), 416–427. <https://doi.org/10.1136/med-hum-2019-011661>
427. Yuen, H. K., Mueller, K., Mayor, E., & Azuero, A. (2011). Impact of participation in a theatre programme on quality of life among older adults with chronic conditions: a pilot study. *Occupational Therapy International*, 18(4), 201–208. <https://doi.org/10.1002/oti.327>
428. Wildridge, V., & Bell, L. (2002). How CLIP became ECLIPSE: a mnemonic to assist in searching for health policy/management information. *Health Information & Libraries Journal*, 19(2), 113–115. <https://doi.org/10.1046/J.1471-1842.2002.00378.X>
429. Zabini, F., Albanese, L., Becheri, F. R., Gavazzi, G., Giganti, F., Giovanelli, F., Gronchi, G., Guazzini, A., Laurino, M., Li, Q., Marzi, T., Mastorci, F., Meneguzzo, F., Righi, S., & Viggiano, M. P. (2020). Comparative Study of the Restorative Effects of Forest and Urban Videos during COVID-19 Lockdown: Intrinsic and Benchmark Values. *International Journal of Environmental Research and Public Health*, 17(21). <https://doi.org/10.3390/ijerph17218011>
430. Zajenkowski, M., Jankowski, K. S., & Koata, D. (2015). Let's dance--feel better! Mood changes following dancing in different situations. *European Journal of Sport Science*, 15(7), 640–646. <https://doi.org/10.1080/17461391.2014.969324>



431. Zbikowski, A., Brüggemann, A. J., Wijma, B., & Swahnberg, K. (2020). Counteracting Abuse in Health Care: Evaluating a One-Year Drama Intervention with Staff in Sweden. *International Journal of Environmental Research and Public Health*, 17(16). <https://doi.org/10.3390/ijerph17165931>
432. Zbranca, R., Cacovean, C., Sacco, P. L., Passaretti, A., Ascolani, Fi., Portaluri, T., & Uboldi, S. (2020). Art Consumption and Well-being during the COVID-19 Pandemic. Retrieved from [https://art-wellbeing.eu/wp-content/uploads/2021/02/Research-Art-Well-being-during-Covid-19\\_Final.pdf](https://art-wellbeing.eu/wp-content/uploads/2021/02/Research-Art-Well-being-during-Covid-19_Final.pdf)
433. Zeilig, H., Tischler, V., van der Byl Williams, M., West, J., & Strohmaier, S. (2019). Co-creativity, well-being and agency: A case study analysis of a co-creative arts group for people with dementia. *Journal of Aging Studies*, 49, 16–24. <https://doi.org/10.1016/j.jaging.2019.03.002>
434. Zeisel, J., Skrajner, M. J., Zeisel, E. B., Wilson, M. N., & Gage, C. (2018). Scripted-IMPROV: Interactive Improvisational Drama with Persons With Dementia-Effects on Engagement, Affect, Depression, and Quality of Life. *American Journal of Alzheimer's Disease and Other Dementias*, 33(4), 232–241. <https://doi.org/10.1177/15333317518755994>
435. Zhang, Y., Yang, Y., Lau, W. Y. T., Garg, S., & Lao, J. (2017). Effectiveness of pre-operative clown intervention on psychological distress: A systematic review and meta-analysis. *Journal of Paediatrics and Child Health*, 53(3), 237–245. <https://doi.org/10.1111/jpc.13369>
436. Zhu, Y., Zhang, Y., Wang, Y., & Trivic, Z. (2021). The Square Dance in China: How Sensory Design Can Foster Inter-Generational Interaction and Improve Older Adults' Wellbeing. *Journal of Urban Design and Mental Health*, 7, 7

# **APPENDICES**



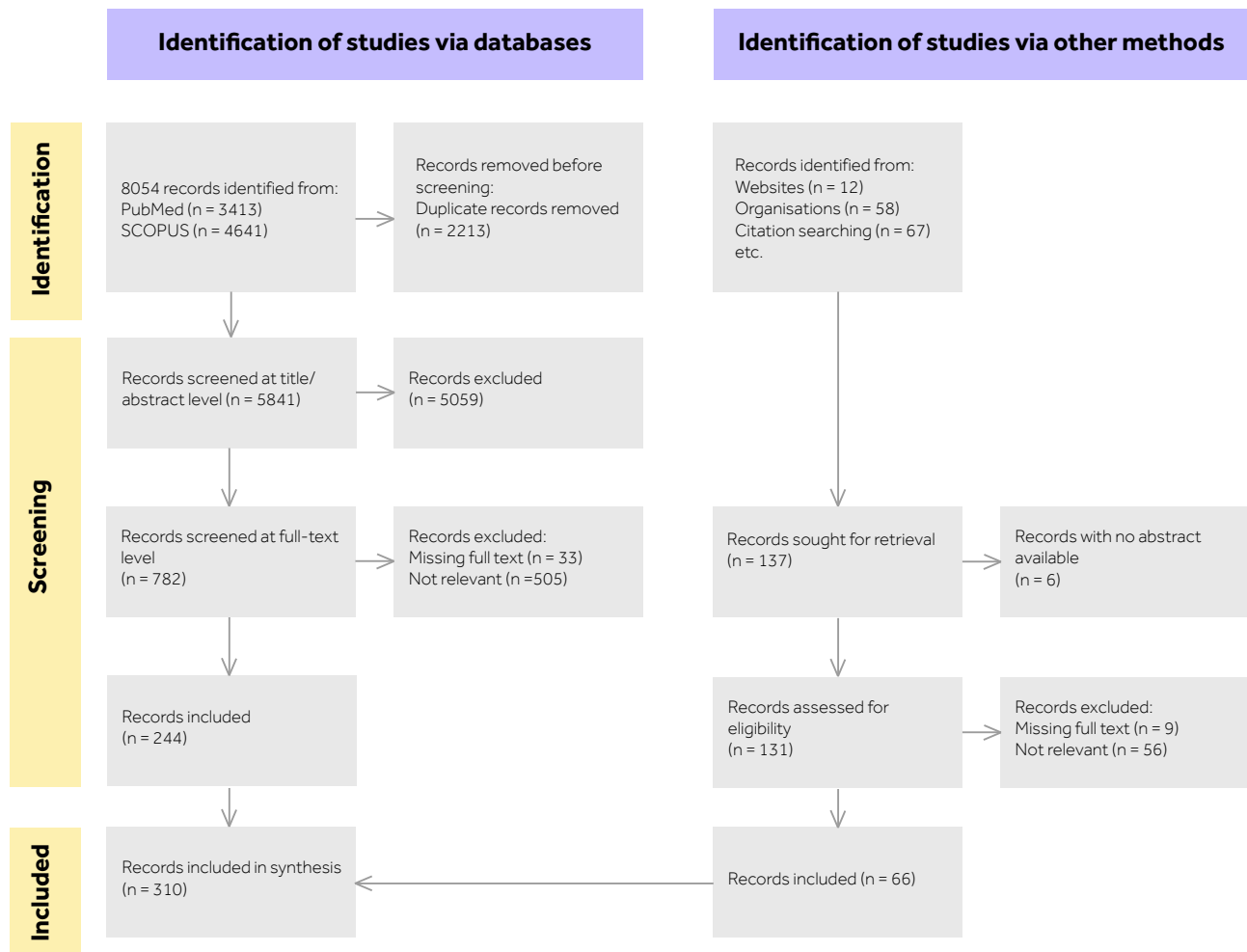
## Appendix I: Search Strategy and Terms

**Table 1. Search strategy used to search in PubMed and Scopus**

Main area	Search block	Search terms
Subjective or individual well-being	Fulfilment and engagement	goal OR purpose
		OR
		satisfaction OR dissatisfaction OR fulfilment
		OR
		engagement OR achievement OR attainment OR accomplishment OR gratification OR realisation
Personal orientation		OR
		cognitive enrichment OR reflection OR problem solving
		OR
		perspective OR resilience
		temperament OR personality OR identity
Emotions		OR
		extroversion OR agreeableness OR openness OR conscientiousness OR neuroticism
		psychological engagement OR contentment
		OR
		happiness OR happy OR pleasure OR joy
Evaluations		OR
		pain OR gain OR loss
		OR
		affect OR emotion OR feeling OR mood
		social comparison OR fairness OR standard OR view OR reflexive OR content OR resilient OR coping
Quality of life		Well-being OR quality of life OR welfare OR health OR happiness OR life expectancy
		OR
		comfort OR standard of living
Community well-being	Work environment	work OR workplace OR occupational safety
		OR
		burnout OR fatigue OR emotional exhaustion OR affective exhaustion OR physical exhaustion OR cognitive exhaustion
		OR disengagement OR cynicism OR efficacy OR productivity OR motivation
		natural environment OR natural space
Living environment		OR
		infrastructure OR area OR neighbourhood OR space OR public space
		OR
		urban design OR co-design
		OR
Urban development		quality of urban spaces OR well-living
		urban OR city OR sustainable OR public OR community OR development

	Sustainability	sustainable development goals OR SDG OR peace OR prosperity OR gender equality OR inequalities OR justice OR partnership
Cultural activities	Referral	prescription OR formal referral OR informal referral OR choice OR advertising OR demand OR community referral OR social prescribing OR cultural prescription
	Participation	active OR passive OR receptive OR co-creation OR co-design OR online OR internet OR asynchronous OR synchronous OR face to face OR digital OR choice OR digitalisation OR one-off participation OR single OR repeated participation OR online participation OR audience participation OR audience development OR public engagement OR cultural intervention OR interactive OR community participation
	Social benefits	education OR mediation OR integration OR marginalisation OR diversity OR intercultural dialogue OR economic inclusion OR solidarity OR cohesion OR inclusion OR empowerment OR trust OR empathy OR political engagement OR civic engagement OR citizen OR volunteer OR voting OR heritage OR inequality OR value OR mobilisation OR rights OR democratic skills OR sense of belonging OR critical thinking OR tolerance OR reflection OR resilience OR identity OR social justice OR trans-cultural dialogue OR community-based OR segregation OR discrimination OR rejection
COVID-19		COVID-19 OR SARS-COV-2 AND natural history OR prevention OR treatment OR isolation OR symptoms OR death OR long-term COVID-19 OR long-term effect OR post-acute OR chronic COVID-19 or post-discharge OR prolonged symptom
Policy		Policy OR plan OR strategy
Type of cultural activity	Type of cultural activity	singing OR dancing OR musical instrument OR drama OR performing in a play OR acting OR drama OR opera OR magic tricks OR circus skills  painting OR drawing OR printmaking OR sculpture OR pottery OR calligraphy OR jewellery making OR textile OR crafts OR embroidery OR crocheting OR knitting OR wood crafts OR woodwork OR carving OR furniture making  reading for pleasure OR creative writing OR composing music OR stories OR storytelling  community arts OR cultural festivals OR fairs OR cultural events OR museums OR galleries OR theatre OR concerts OR exhibitions  digital artworks OR computer animations OR filmmaking OR videos OR photography OR radio plays OR television dramas OR creative OR creativity  creative OR creativity
Searches included terms with and without an apostrophe and hyphens where appropriate (i.e., well-being and well-being)		

## Appendix II: PRISMA flow diagram



## Appendix III: Data extraction form

The data extraction form has been set up the Qualtrics platform and it included the following variables:

Variable	Type
<b>1. GENERAL DETAILS</b>	
1.1. CADIMA ID	Open
1.2. Notes (any thoughts):	Open
<b>2. SPECIFIC DETAILS</b>	
2.1. Type of study: <input type="checkbox"/> Meta-analysis or systematic review (1) <input type="checkbox"/> Scoping review or narrative review (2) <input type="checkbox"/> Randomised controlled trial (individual or cluster) (3) <input type="checkbox"/> Non-randomised/quasi-experimental (4) <input type="checkbox"/> Observational studies (cohort, case-control, cross-sectional, case series, case reports) (5) <input type="checkbox"/> Health economic evaluation study (6) <input type="checkbox"/> Qualitative study (7) <input type="checkbox"/> Prediction/prognostic studies (8) <input type="checkbox"/> Text and expert opinion papers (9) <input type="checkbox"/> Clinical practice guidelines (10) <input type="checkbox"/> Policy brief/policy report (11) <input type="checkbox"/> Mixed-methods study (13) <input type="checkbox"/> Other (please specify): (12) _____	Multiple selection
2.2. Aim/objective(s) of study (copy/paste):	Open
2.2.0. Type of intervention/programme <input type="checkbox"/> Individual (1) <input type="checkbox"/> Group (2) <input type="checkbox"/> Mixed (3)	Single selection
2.2.0.0. Exact type of intervention (copy/paste from the article)	Open
2.3. Country (or countries/region) where the intervention took place:	Open
2.4. Passive/receptive cultural participation (visitor, spectator to cultural events, home based cultural consumption): <input type="checkbox"/> Theatre, opera, dance (1) <input type="checkbox"/> Music (2) <input type="checkbox"/> Film (3) <input type="checkbox"/> Visual arts - artworks, museums, galleries, art exhibitions (4) <input type="checkbox"/> Literature - library visits, readings (5) <input type="checkbox"/> Art festivals and fairs (6) <input type="checkbox"/> Community events (neighbourhood events, celebrations, etc) 7) <input type="checkbox"/> Architecture and heritage sites (8) <input type="checkbox"/> games (9) <input type="checkbox"/> Other (please specify): (10) _____ <input type="checkbox"/> Not relevant (11)	Multiple selection

<p>2.5. Active cultural participation:</p> <p><input type="checkbox"/> Singing (1)</p> <p><input type="checkbox"/> Playing a musical instrument (2)</p> <p><input type="checkbox"/> Theatre/improvisation (3)</p>	Multiple selection
<p><input type="checkbox"/> Dance (4)</p> <p><input type="checkbox"/> Draw/Paint (5)</p> <p><input type="checkbox"/> Photography (6)</p> <p><input type="checkbox"/> Video (7)</p> <p><input type="checkbox"/> Computer generated art (8)</p> <p><input type="checkbox"/> Writing (poems, small text, essays etc) (9)</p> <p><input type="checkbox"/> Crafts (model clay, jewellery, collage etc) (10)</p> <p><input type="checkbox"/> DIY (Bricolage, building toys, objects for my home, etc) (11)</p> <p><input type="checkbox"/> Sewing, tailoring, knitting, embroidery (12)</p> <p><input type="checkbox"/> Other (please specify): (13) _____</p> <p><input type="checkbox"/> Not relevant (14)</p>	
<p>2.6. Where is the cultural participation or intervention taking place:</p> <p><input type="checkbox"/> Home based cultural consumption (1)</p> <p><input type="checkbox"/> Art institution or centre (2)</p> <p><input type="checkbox"/> Social or community centre (3)</p> <p><input type="checkbox"/> Health institution (4)</p> <p><input type="checkbox"/> Street (5)</p> <p><input type="checkbox"/> School (6)</p> <p><input type="checkbox"/> Online (7)</p> <p><input type="checkbox"/> Other (please specify): (8) _____</p>	Multiple selection
<p>2.7. Target group</p>	Open
<p>2.8. Number of participants</p>	Open
<p>2.10. Type of referral</p> <p><input type="checkbox"/> Formal referral (someone - medical, from a social NGO - not from the cultural sector recommends cultural activities etc) (1)</p> <p><input type="checkbox"/> Informal referral (friends, etc) (2)</p> <p><input type="checkbox"/> Participation by choice (participate by own initiative) (3)</p> <p><input type="checkbox"/> Cultural referral (invitation is made by someone from the cultural sector) (4)</p> <p><input type="checkbox"/> Participation through study recruitment (6)</p> <p><input type="checkbox"/> Other_____ (list the term used in the article) (5)</p>	Multiple selection
<p>2.11. Number of sessions</p> <p><input type="checkbox"/> One-off participation (one session) (1)</p> <p><input type="checkbox"/> Multiple occasions ____ (mention the number of sessions or the duration of the intervention e.g., 12 monthly sessions) (2)</p>	Single selection
<p><b>3. TOPIC AND OUTCOMES</b></p>	
<p><input type="checkbox"/> Culture and health outcomes (1)</p> <p><input type="checkbox"/> Culture and subjective well-being (2)</p> <p><input type="checkbox"/> Culture and community well-being (3)</p> <p><input type="checkbox"/> Culture and COVID-19 (4)</p>	Multiple selection

<p>3.1. Outcomes focus on...</p> <p><input type="checkbox"/> Prevention and promotion (affect social determinants of health, support child development, encourage health promoting behaviours, help to prevent ill health, support caregiving) (1)</p> <p><input type="checkbox"/> Management and treatment (help people experience mental illness, support care for people with acute conditions, help to support people with neurological disorders, assists with the management of non-communicable diseases, support end of life care) (2)</p>	<p>Single selection</p>
<p>3.2. Outcomes of the intervention:</p> <p><input type="checkbox"/> Psychological (mental health related) (1)</p> <p><input type="checkbox"/> Physiological (e.g., lower stress hormone response, lower BMI) (2)</p> <p><input type="checkbox"/> Behavioural (e.g., increased exercise, skills development, adoption of healthier behaviours) (3)</p>	<p>Multiple selection</p>
<p>3.3. Outcomes of the intervention:</p> <p><input type="checkbox"/> Change in personal goal/purpose/meaning/perspective (1)</p> <p><input type="checkbox"/> Satisfaction/fulfilment/achievement/ accomplishment/gratification/realisation/ contentment (2)</p> <p><input type="checkbox"/> Cognitive enrichment (3)</p> <p><input type="checkbox"/> Reflection/problem solving (4)</p> <p><input type="checkbox"/> Resilience/coping (5)</p> <p><input type="checkbox"/> Psychological engagement (6)</p> <p><input type="checkbox"/> Happiness/pleasure/joy/gain (7)</p> <p><input type="checkbox"/> Pain/loss (8)</p> <p><input type="checkbox"/> Affect/emotion/feeling/mood (9)</p> <p><input type="checkbox"/> Well-being/welfare (10)</p> <p><input type="checkbox"/> Well living (11)</p> <p><input type="checkbox"/> Quality of life (12)</p> <p><input type="checkbox"/> Life expectancy (13)</p> <p><input type="checkbox"/> Standard of living (14)</p> <p><input type="checkbox"/> Comfort (15)</p> <p><input type="checkbox"/> Other (18)_</p>	<p>Multiple selection</p>
<p>3.4. Outcomes of the intervention:</p> <p><input type="checkbox"/> Workplace/occupational safety (1)</p> <p><input type="checkbox"/> Burnout/fatigue/exhaustion (2)</p> <p><input type="checkbox"/> Productivity/motivation (3)</p> <p><input type="checkbox"/> Natural environment (4)</p> <p><input type="checkbox"/> Infrastructure/area/neighbourhood/ space (5)</p> <p><input type="checkbox"/> Urban design and quality of urban spaces (6)</p> <p><input type="checkbox"/> Sustainable development goal (7)</p> <p><input type="checkbox"/> Peace (8)</p> <p><input type="checkbox"/> Prosperity (9)</p> <p><input type="checkbox"/> Gender equality (10)</p> <p><input type="checkbox"/> Community development (11)</p> <p><input type="checkbox"/> LGBT rights (12)</p> <p><input type="checkbox"/> Reduce inequalities (13)</p> <p><input type="checkbox"/> Democratic skills (14)</p> <p><input type="checkbox"/> Diversity/tolerance/integration/ solidarity/cohesion (15)</p> <p><input type="checkbox"/> Intercultural/trans-cultural dialogue (16)</p>	<p>Multiple selection</p>

<input type="checkbox"/> Social justice (17) <input type="checkbox"/> Empowerment (18) <input type="checkbox"/> Trust (19) <input type="checkbox"/> Political engagement (20) <input type="checkbox"/> Mobilisation (21) <input type="checkbox"/> Rights (22) <input type="checkbox"/> Mediation (23) <input type="checkbox"/> Empathy (24) <input type="checkbox"/> Civic engagement/voting/volunteer (25) <input type="checkbox"/> Loneliness/isolation (26) <input type="checkbox"/> Social support (27) <input type="checkbox"/> Heritage (28)	
<input type="checkbox"/> Death/mourning (29) <input type="checkbox"/> Community resilience (30) <input type="checkbox"/> Collaboration (31) <input type="checkbox"/> Identity and belonging (32) <input type="checkbox"/> Other (please specify): (33)	
3.5. Outcomes of the intervention: <input type="checkbox"/> Better mental recovery (1) <input type="checkbox"/> Better physical recovery (2) <input type="checkbox"/> Increased social support (3) <input type="checkbox"/> Resilience (4) <input type="checkbox"/> Other (please specify): (5)	Multiple selection
3.6. Moment in COVID-19 disease progression when culture was used: <input type="checkbox"/> Self or mandated isolation (1) <input type="checkbox"/> Treatment during disease (2) <input type="checkbox"/> Treatment during recovery (3) <input type="checkbox"/> Death/mourning (4) <input type="checkbox"/> Long-term COVID-19 (5) <input type="checkbox"/> Other (please specify): (8)	Multiple selection
3.7. Negative outcomes (authors' notes regarding any evidence of the arts leading to negative effects)	Open
3.8. Determinants of success (copy factors that could have improved/improved the implementation and outcomes of the intervention. Key words: success, gain, benefit, improve, advantage)	Open
3.9. Determinants of failure (copy factors that could have hindered/hindered the implementation and outcomes of the intervention; for example, the skills of the facilitators/artists; tools, resources, etc. Key words: limitation, failure, issue, barrier)	Open
3.10. Key conclusions of study authors (copy/paste from the record)	Open
3.11. Potential to inform policies (authors' conclusion regarding the extent to which the outcomes of the study have the potential to inform public policies, strategies, plans)	Open
3.12. Ethical issues (authors' conclusion regarding any ethical issues in the development and delivery of arts programmes for health)	Open
3.13. Relevant references (screen reference list of the record and copy any relevant references to include in the scoping review)	Open
<b>4. TO SUPPORT THE MAPPING PROCESS</b>	



4.1. Project name (if the record reports the name of a project/initiative/organisation) <input type="checkbox"/> Project or initiative (a single intervention, pilot projects, not very long) (1) <input type="checkbox"/> Programme (long term, recurring, multi-year, comprehensive) (2) <input type="checkbox"/> Policy (strategies, policy papers or policy initiatives) (3) <input type="checkbox"/> Funding scheme (4) <input type="checkbox"/> Unclear (6) <input type="checkbox"/> Name: (5) _____	Single selection
4.1.2. Name of the programme _____	Open
4.2. Lead organisation/institution: name and country	Open
4.3. Lead organisation/institution: type <input type="checkbox"/> Public (1) <input type="checkbox"/> Private -NGO, professional organisations, company (2) <input type="checkbox"/> Health (3) <input type="checkbox"/> Culture (4)	Single selection
<input type="checkbox"/> Social (5) <input type="checkbox"/> Unclear (7) <input type="checkbox"/> Other (please specify): (6)	
4.4. Partner organisation/institution: name and country	Open
4.5. Partner Led organisation/institution: type <input type="checkbox"/> Public (1) <input type="checkbox"/> Private -NGO, professional organisations, company (2) <input type="checkbox"/> Health (3) <input type="checkbox"/> Culture (4) <input type="checkbox"/> Social (5) <input type="checkbox"/> Unclear (7) <input type="checkbox"/> Other (please specify): (6)	Single selection
<b>5. POLICY</b>	
5.1. Policy name/title:	Open
5.2. Implementation level (town, national, regional, institutional):	Open
Name of town, institution (if available):	Open
5.4. Date of enforcement	Open
5.5. Short description (copy/paste – scope of policy, main areas of focus)	Open
5.6. Outcomes (any results regarding the implementation of the policy):	Open

# CULTURE FOR — HEALTH



Northern  
Dimension  
Partnership  
on Culture



**midt**  
regionmidtjylland

Co-funded by the  
European Union

