

A qualitative evidence review of place and space, intangible assets and volunteering and participatory arts and sport or physical activity for enhancing wellbeing or alleviating loneliness across the adult lifecourse (16+ years)

Synthesis of qualitative studies: place and space

Corresponding Author: Professor Louise Mansfield¹

Co-authors: Professor Norma Daykin², Professor Catherine Meads³, Professor Alan Tomlinson⁴, Dr Karen Gray¹, Dr Alex Golding, Professor Christina Victor⁵

1. Welfare, Health and Wellbeing, Institute for Environment, Health and Societies, Brunel University London.
2. Tampere University Finland
3. Anglia Ruskin University
4. University of Brighton
5. Ageing Studies, Institute for Environment Health and Societies, Brunel University London

May 2020

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Putting Place at the Centre of Wellbeing, Culture and Sport

Summary and Key Messages

What do we mean by place and space in this review?

Typically, space is defined as a dimension in which things are located and as something abstract, without meaning while place refers to a space with meaning. However, the evidence in this review reflects current theoretical thinking about the complexities of place and space and shows the two are connected because people are continually making sense of space in creating place. This report indicates the interconnection by using the term 'place/space' unless the evidence specially articulates a single definition. The evidence emphasises that the emotional, social, cultural and political meanings attached to physical and social environments are shaped by experiences of participatory arts and sports and the associated personal, local, national and global relationships. Place/space therefore affects peoples' wellbeing through feelings of belonging, community, contentment and escape as well as feelings of exclusion, loneliness, fear and anxiety. The evidence illustrates that meanings take shape in places and spaces, and this reflects the importance of processes of **placemaking**. In culture and sport, placemaking involves multifaceted activities and collaborative processes, often in the creation of public spaces and using community asset and inspiration approaches to enhance wellbeing.

What do we mean by wellbeing and loneliness in this review?

The term wellbeing is used synonymously with a wide range of concepts in the evidence in this review. Studies refer to positive and/or negative psychological and emotional constructs of wellbeing. Positive wellbeing is associated with feelings of excitement, nostalgia and pleasure, a sense of freedom, kinship, security, support and being valued, recovery and restoration, a positive sense of identity, agency and autonomy. Negative wellbeing is connected to feelings of fear, anxiety, discomfort (mental and physical) alienation and stigma. Studies which provide findings on loneliness refer to the various unpleasant feelings that occur when the quality of a person's social relationships are poor. There is evidence in this review of the negative wellbeing impact of the absence of meaningful relationships (emotional loneliness), and deficits in the quality and quantity of relationships (social loneliness).

There is also evidence of positive wellbeing impact of solitude conceptualised as a powerful force for calm and peace; a type of recharging experience adopted when people feel a need to break from human connection for a while.

What do we mean by themes and processes in this review?

Our qualitative analysis identified five key **themes** which concern: (i) belonging and identity in place and space (ii) places and spaces of community and locality, (iii) therapeutic and sensory spaces, (iv) safe spaces, and (v) temporal aspects of place and space (place-temporality). These themes point to **processes** by which participatory arts and sport operate to enhance wellbeing and/or alleviate loneliness. They also indicate processes contributing to negative wellbeing experiences. Processes in this report may refer to a series of steps or to patterns of behaviours and emotions that lead to positive and negative wellbeing experiences. These can be personal and inter-personal but they also shape organisational rules, roles and imperatives as well as wider policy environments that affect wellbeing. The evidence in this review, then, has led us to define processes in terms of human relationships extending to emotional, social, cultural and organisational ways by which place/space connect with taking part in participatory arts or sports for enhancing wellbeing and/or alleviating loneliness - or not.

Key messages about place/space, participatory arts, sports and wellbeing and/or loneliness

Key messages below make direct reference to the processes by which place/space can enhance or reduce wellbeing and/or alleviate loneliness when taking part in participatory arts or sports activities. The evidence shows that successful processes are mediated by the awareness and skills of local cultural and sport leaders. They are also shaped by the effects of policy frameworks, infrastructure and resources. This evidence shows the importance of overcoming barriers to engagement, including perceptions of class, gender and ethnicity as well as the effect of national provision policy, in order to enable positive cultural and sport engagement in place/space.

Belonging and identity in place and space

Headline evidence

The physical environment has a role to play in the social and psychological development of peoples' identities and therefore their sense of wellbeing and reflects the theoretical concept of place identity. The evidence shows that processes of self-discovery and knowledge exchange occurring through participation in participatory arts and sports construct meaning, foster relationships and mediate change in the places in which participation takes place. Processes of attachment and association to place and space are associated with positive wellbeing experiences through participatory arts and sport whilst dissociation from place and space creates negative wellbeing experiences. Where places and spaces for participatory arts and sports participation provide for emotional experiences of solitude, wellbeing is enhanced through personal growth and creativity, the remaking of self, future hopes, or the reframing of one's life. The evidence also shows that allowing and encouraging people to take part in new and enjoyable spaces with people who may be already known and/or with new social contacts can enhance wellbeing. The evidence illustrates that through participatory arts and sports, people can feel both connected to and displaced from a place.

Self-discovery, knowledge exchange and wellbeing in places for participatory arts and sports

Providing places and spaces in which people can reflect on and discover their personal character through participatory arts and sport contributes to wellbeing through processes of reflection about personal values, beliefs and views about others. Participatory arts and sports are activities in which place/space is created by people as playful, allowing opportunities for learning, collaboration and connection, curiosity, developing personal goals and visions, healing and recovery, and solitude and enabling a sense of security and authenticity. People adapt spaces to their needs in participatory arts and sport and challenging barriers to physical environments is a way to maximise wellbeing through such activities.

Place attachment, association, disassociation and wellbeing in participatory arts and sports

Attachment or association with place is strengthened through participatory arts and sports. Dance, walking, hiking, mountain biking and surfing have all been found to create nostalgic experiences and positive memories of life events and to evoke familiar connections to a place (for example, associating it with moments such as graduating from university, or with being at work or seeing family). Processes which stimulate the senses; sights, sounds, smells and touch are central to wellbeing enhancement through place attachment, as is the arousal of positive emotions (joy, love, achievement) and the creation of learning places/spaces associated with participatory arts and sports. Disassociation from place/space (i.e. feeling as if one

does not belong) is also stimulated through emotional reflection occurring through activities such as dance and adventure sports.

Depending on the context and participant group, participatory arts and sports activities could evoke memories of disaster, conflict, crisis, and separation from family and communities. Yet transformational processes are also evident in taking part in participatory arts and sports which offer opportunities for coming to terms with personal and environmental challenges. Nature-based activities can create new places to experience pleasure, take ownership and regenerate meaning in place. There are barriers to the positive wellbeing impact of place attachment including perceptions of class-centric offers, lack of knowledge and education, and limited access to resources.

Place, the emotions, belonging and wellbeing in participatory arts and sports

Accessing public places for participatory arts and sports evokes a range of feelings that can contribute to wellbeing enhancement such as excitement, happiness, enjoyment, relaxation, purpose, confidence and nostalgia. It can also instil emotions connected to negative wellbeing such as fear and discomfort. Activities as various as walking, busking, singing, surfing and skateboarding can lead to wellbeing enhancement through the creation of pleasurable physical places/spaces, including well-kept gardens, colour and animation in the street, or through the formation of personally meaningful tangible assets such as buildings, roads or parks. Establishing moments of togetherness and emphasising inclusive places and practices through culture and sport is important for maximising wellbeing, including for those living with physical and mental health conditions. These affective processes by which wellbeing is enhanced can directly contribute to the alleviation of emotional loneliness. Positive emotions are not necessarily immediately felt in places and spaces dedicated to participatory arts and sport but develop through more sustained and supported involvement.

Places and spaces of community and locality in participatory arts and sports

Headline evidence

The development and perception of community has a role to play in individual and group wellbeing through taking part in participatory arts and sport. The evidence in this review shows that community broadly relates to the identification of and engagement in shared interests, experiences and activities. Place-making processes which mediate positive and negative wellbeing and loneliness in participatory arts and sport include availability and access to opportunities and assets, experiences of

diversity and social divisions, the impact of physical and mental health conditions and the effects of migration and war. Maximising the potential of place/space for enhancing wellbeing and alleviating loneliness through participatory arts and sport is connected to access and design of communal public spaces for participation, such as libraries, community centres, parks and museums, as well as the value of nature places and spaces for supporting positive experience of culture and sport.

Bonding and bridging in participatory arts and sports

Processes of bonding and bridging social capital are central within the community places and spaces for participatory arts and sports. Bonding takes place through processes of social interaction, enjoyment and shared understanding that enable support, friendships and meaningful connections to grow. These processes can extend beyond the strengthening of identity through interpersonal connections to include development of community spirit and civic participation. Bonding can create in-group identities and, by definition, can reinforce exclusion of out-groups. In participatory arts and sport, exclusionary practices and processes can alienate some participants, such as those who feel they lack the physical or psychological competence to take part or do not match the in-group's social, demographic and cultural profile. Bridging, which connects people to wider networks and opportunities, can help to counter potentially negative outcomes from bonding in participatory arts and sport. The evidence illustrates that participatory arts and sport participation fosters bridging through a number of processes, for example by promoting learning, extending participants' access to places and spaces they would not usually encounter, sharing culture and heritage across demographic and social divides, and providing spaces and allowing for place-making in which political divisions and conflicts can be safely addressed.

Therapeutic and sensory spaces

Headline evidence

Connections to the material, aesthetic and social elements of a place/space have wellbeing impacts because they evoke psychological or emotional responses and heighten awareness of bodily sensations in people involved in participatory arts or sport. Wellbeing is enhanced, for example, through sensing or feeling wind, rain or weather acting on the skin, or negotiating difficult terrain in a landscape while walking or cycling; or through feeling the action of the waves on the body or the taste of salt on the tongue while surfing. Pleasant sensations also mediate positive feelings of exhilaration, self-confidence and achievement. Shared experiences of sensory pleasures in the places and spaces for participatory arts and sport can strengthen wellbeing, including through immediate feelings or through nostalgia.

Place-based sensory processes (emotional and bodily feelings) have the potential to enhance wellbeing and alleviate loneliness through experiences of distraction and/or escape or respite and/or recovery from distressing experiences in life. These sensory processes happen in instances of solitude or through connection with others. It is also the case that unpleasant sensations including actual, remembered, or anticipated physical or emotional discomfort can prevent people experiencing the wellbeing benefits that places and spaces for participatory arts and sports can offer.

Distraction or escape through participatory arts or sports in place

The places and spaces in which participatory art and sports take place can serve to enhance the sensory experience of wellbeing through the elicitation of emotional processes that distract, or provide distance from everyday stresses, roles or responsibilities. This is connected with a capacity for places and spaces to allow for solitude as well as encourage connection with others. In this evidence review, processes of and places for distraction are commonly associated with activity taking place in the outdoors such as hiking or walking in forest and parklands, but similar wellbeing impacts have been experienced in urban or built environments.

Respite and recovery through participatory arts or sports in place

For those recovering from distressing experience, trauma, or serious physical or mental ill health the role of place/space in participatory arts or sport can be to offer a site for respite or recovery processes to take place. Offering a place/space for respite or recovery through participatory arts and sports allows processes of ownership of a new place or re-connection with a familiar place to occur. Places which enable or develop processes of learning, exploration or reimagination of place are also significant in promoting wellbeing through participatory arts and sport.

Safe places and spaces

Headline evidence

Equipment, activities and people can be organised in such a way as to create places and spaces in which those involved in participatory arts or sport can feel confident that they will not be exposed to emotional or physical harm. The evidence shows that such safe places and spaces have the potential to enhance wellbeing through processes of support and mutual relationships, and through those that challenge and mitigate the effects of social stigma.

Enabling mutual and supportive relationships in places for participatory arts and sports

Safe spaces/places created through participatory arts or sports can enable people to interact with their peers and others in ways that they experience as genuine and

mutually supportive. In such contexts, wellbeing may be enhanced, and loneliness alleviated through feelings of increased confidence and self-efficacy, fellowship and community. Processes of mutuality or reciprocity can be engendered through shared goals in sports and participatory arts (e.g. a singing activity or game of football). The evidence illustrates the wellbeing benefits of creation safe places and spaces for those experiencing mental or physical illness, geographical dislocation resulting from war, natural disaster or migration, or the constraints of the criminal justice system.

Challenging and mitigating for the effects of social stigma

For those experiencing discrimination or disapproval based on a perception of their difference from others, safe places and spaces created through participatory arts or sport can provide opportunities for challenging social stigma that might be associated, for example, with mental illness, physical impairment or encounters with the criminal justice system. The evidence shows the mitigating effect of safe places and spaces on social stigma within care homes, prisons and art galleries in which improved processes of communication and learning about those who are stigmatised have become the focus of activity. Sustaining participants' engagement with spaces/places is critical for long-term challenges to social stigma.

Temporal aspects of place and space (place-temporality)

Headline evidence

Place and space influence the patterns, timing and rhythms of movements associated with participatory arts and sports, which in turn influence people's wellbeing. Positive wellbeing experiences are associated with activities in places which locate or position people in the present, allowing them to reflect on and cope with life events. Key processes that allow for this focus on providing a place for appropriately paced activities creating time to consider issues of history, heritage and to elicit practices of storytelling, memories and nostalgia, commonly through creative participatory arts activities linked to music and dance. Creating informal patterns of place and space in clinical settings have been shown to allow for the remaking of spatial arrangements, shifting established routines for positive wellbeing experiences. Sports places and spaces can enable the creation of collaborative rhythmic activity, evoking a shared positive sense of togetherness and communal wellbeing enhancement.

Lay Summary

We know that the places where people live, work and play can have both positive and negative influences on their wellbeing in terms of how they feel about themselves and others. Emotional, social, cultural and political meanings about place occur through participation in cultural and sports activities, which can create feelings of belonging, community, contentment, escape and also feelings of exclusion, fear and anxiety. Yet, there is a lack of clarity about how place and space and cultural and sporting practice and activity should be addressed in policy and practice concerned with enhancing wellbeing and alleviating loneliness. The review is necessary because evidence on place and space in culture and sport is scattered across different disciplines, located variously, and which has not been fully examined in relation to wellbeing. The topic was agreed with organisations who work on national policies for wellbeing and loneliness in the UK and those who manage, deliver and research it.

In the review, we wanted to identify evidence on the role of place and space in enhancing wellbeing or alleviating loneliness when taking part in participatory arts and sport or physical activity because the way we understand place and space influences decisions about how best to address wellbeing in peoples' cultural and sporting lives.

We looked at studies published worldwide between 2009 and 2019 and found fifty-nine sources examining space or place, wellbeing or loneliness, participatory arts and sport or physical activity. In these studies, five key thematic areas and their findings have been identified: (i) belonging and identity in place and space (ii) places and spaces of community and locality, (iii) therapeutic and sensory spaces, (iv) safe spaces and (v) temporal aspects of place and space (place-temporality). These themes point to processes by which participatory arts and sport operate to enhance wellbeing and/or alleviate loneliness. The evidence in this review means we define processes in terms of human relationships extending to emotional, social, cultural and organisational ways by which place/space connect with taking part in participatory arts or sports for enhancing wellbeing and/or alleviating loneliness - or not.

These studies include participatory arts and sport or physical activities in different places and spaces for diverse population groups across the life course. The participants include: rural (living in the countryside) and urban (built environment) communities, families, football fans, combat veterans, older people, people living with mental and physical ill health, war and trauma survivors, prisoners, immigrants,

asylum seekers and refugees, unemployed people, and people living in poverty. The sports and physical activities incorporate walking watching or playing football, rugby, adaptive sports and action, swimming, cycling, nature activities, Tai Chi and mindfulness and street and board games. The participatory arts activities incorporate dance and Dance Movement Therapy, art-viewing and artmaking, music-making, drama, visual arts, community singing, poetry workshops and object handling.

We have high confidence that places and spaces and placemaking are important in enhancing wellbeing and potentially alleviating loneliness by creating a positive sense of belonging and identity, community and therapeutic or sensory experience in participatory arts, sport or physical activity. We have moderate confidence that places and spaces and placemaking are important in enhancing wellbeing by creating safe spaces for those facing physical or emotional harm via participatory arts, sport or physical activity. We have moderate confidence that the pattern and timing of activities in places and spaces for participatory arts, sport or physical activity i.e. when, how long, who with and what types of activity occur, have a positive influence of wellbeing. There is an opportunity to use this evidence base in designing and promoting place for enhancing wellbeing in culture, cultural heritage and sport policy and practice, and to further build better evidence for doing so.

Executive Summary

Introduction

The protocol for this review was registered on the international Prospective Register of Systematic Reviews (PROSPERO) (registration number: CRD42019142558). It is available at:

https://www.crd.york.ac.uk/prospero/display_record.php?RecordID=142558.

The review sought to address the question ‘how are space or place, intangible assets and volunteering conceptualised in reported qualitative research findings on sport/physical activity and participatory arts for enhancing wellbeing and alleviating loneliness across the adult life course (16+ years)?’

Review approach

The review included empirical research that conceptualised how place and space can enhance wellbeing or alleviate loneliness when taking part in participatory arts and sport or physical activity using qualitative study designs and published between 2009 and June, 2019. Grey literature in the form of evaluation reports (from 2009 to 2019) were included. The review is a qualitative synthesis of evidence.

Results

After duplicates were removed, the electronic searches returned 11,088 published records for screening. Currently and for this report, 59 qualitative studies examining place and space and wellbeing and loneliness in participatory arts, sport or physical activity are synthesised and reported. There are 49 published sources and 10 unpublished reports. The unpublished literature refers to project evaluations reporting qualitative data and doctoral dissertations. Further searches, screening, extraction and synthesis will take place on the topics of intangible assets and volunteering in participatory arts, sport or physical activity, as per the project workplan and will be reported by December 2019.

Characteristics of the included studies (qualitative)

The included studies examined the impact of taking part in a range of participatory arts and sport or physical activities in different places and spaces for diverse population groups across the life course. The participants include: members of the

general public living in both rural and urban communities without identified physical or mental health conditions, families, football fans, combat veterans, older people living in residential care and in the community, people with experience of mental health, genocide survivors, people in youth justice settings, immigrants, asylum seekers and refugees, people with experience of war, people with intellectual or physical disabilities, people living with dementia and their care partners, people with chronic lung disease, people living with addiction, action sports enthusiasts living in a natural disaster areas, unemployed people and people living in poverty. The sports and physical activities incorporate: walking in both natural and urban settings in organised, peer-led groups or independently, watching or playing football, rugby, adaptive sports, action sports including surfing, skiing, mountain-biking, skateboarding and climbing, coastal swimming, road cycling and cycle tourism, wilderness camp activities, nature walks, Tai Chi and mindfulness and street and board games. The participatory arts activities cover: dance and Dance Movement Therapy, art-viewing and artmaking in gallery settings, music-making, drama, visual arts, community singing, interaction with public artworks on an urban walk, adult creative art classes, poetry workshops and object handling and creative activities in museum and heritage spaces.

The review includes qualitative evidence variously collected from interviews, observations, document analysis, storytelling through music and dance and focus groups. The evidence has been interpreted and synthesised to identify and discuss key conceptualisations of place and space and the connection to wellbeing enhancement or alleviation of loneliness. Limitations in the qualitative studies comprise the limited discussion of recruitment strategies, insufficiently rigorous data analysis, inadequate discussion of relationships between participants and researcher and a lack of detail regarding ethical issues.

The review includes published and unpublished reports from more than 1933 participants, from 20 countries: Australia, Northern Ireland, England, Wales, Scotland, Taiwan, Rwanda, Sweden, Timor-Leste, USA, Canada, Singapore, Republic of Ireland, New Zealand, Norway, Denmark, Netherlands, Scotland, Germany and Israel.

Overview of the study findings (place and space)

The fifty-nine qualitative studies included in this review focus on understanding and conceptualising place and space, wellbeing and/or loneliness in participatory arts, sport or physical activity. Five key thematic areas and their findings are identified, which concern: (i) belonging and identity in place and space (ii) places and spaces of community and locality, (iii) therapeutic and sensory spaces, (iv) safe spaces and (v)

temporal aspects of place and space (place-temporality). These themes point to processes by which participatory arts and sport operate to enhance wellbeing and/or alleviate loneliness. The evidence in this review means we define processes in terms of human relationships extending to emotional, social, cultural and organisational ways by which place/space connect with taking part in participatory arts or sports for enhancing wellbeing and/or alleviating loneliness - or not.

We have high confidence that taking part in meaningful and appropriate places and spaces for participatory arts, sport or physical activity can enhance wellbeing and potentially alleviate loneliness through developing a sense of belonging, identity and community. We also have high confidence that the creation of therapeutic and sensory spaces for taking part contributes to enhanced wellbeing. The review reports a judgement of moderate confidence in ensuring that there are safe spaces for taking part in arts, sport or physical activity, which can lead to wellbeing benefits including the alleviation of loneliness. A judgment of moderate confidence is made about evidence for wellbeing enhancement in relation to the patterns, timings and rhythms of movements and activities in places, and the ways that time and timing are significant to peoples' experience (place-temporality). Moderate confidence judgements are due to moderate concerns with methodological limitations, coherence and adequacy. Most published studies obtained appropriate ethics approval although this was not always reported extensively. Methodological weaknesses of studies included a lack of exact details about the researcher's role, potential bias and influence on sample recruitment, settings and the responses of the participants. The grey literature was of mixed quality including high quality reports with details of the methodological approach, theoretical analysis and recognition of limitations, and low quality (credibility) reports with little detail of the methods and commonly taking participant accounts at face value without theoretical analysis.

Strengths and limitations of the review

The focus on the concepts of place and space and the interconnections with wellbeing and loneliness presented certain challenges when searching for and finding evidence, meaning that it is possible that some relevant evidence has not been included. However, we undertook a comprehensive search strategy to identify all existing eligible studies published for the search dates. We also made provision for supplementary searches to identify studies that could have been missed in the database searching alone. The pre-publication of our protocol on PROSPERO ensures methodological transparency and mitigates against potential post-hoc decision-making, which can introduce bias to the process. Dual screening of searches

and data extraction and independent quality assessment using the CERQual criteria ensured a rigorous process.

Taking published studies as the sole evidence increases the potential risk of publication lag wherein possible important new evidence that has not yet been included in published reports is not identified and included. The grey literature review allowed recent unpublished data from evaluations completed (with no date specification) to be included.

The use of the CERQual criteria introduces an element of subjective judgement. A consistent approach to judgements across the different concepts has been applied, and more than one reviewer was involved in making decisions while recognising that these judgements are open to interpretation.

Implications for research policy and practice

1. The evidence in this review shows that emotional, social, cultural and political meanings that take place through participatory arts, sport and physical activities can enhance positive feelings (belonging, community, contentment and escape), but certain conditions and circumstances can also generate negative feelings of exclusion, fear and anxiety. This makes space, place and placemaking, however complex its dimensions, important for understanding and promoting wellbeing in culture and sport policy and practice.
2. There is a relatively large body of fairly high-quality qualitative research conceptualising place/space and its influence upon positive feelings of belonging and community. This can be used to support public policy and practice initiatives to ensure local opportunities for people to meet and engage with people who may be like them or different from them, in ways that achieve integration and social cohesion. Codesigning public spaces to recognise local need, and creating environments for shared experiences, inclusive practices of moments of solitude can maximise the wellbeing potential of places and places for participatory arts and sports.
3. Sensory and therapeutic spaces for participatory arts, sport and physical activity have the potential for enhancing wellbeing and connecting with nature. Such connections can allow people to tap into the emotional aspects of wellbeing, including solitude and alleviation of loneliness. Activities in places that allow people to invite people to draw on a sense of sight, sound, smell, taste or touch and create positive emotional experiences in doing so can have positive wellbeing benefits.

4. Place and space can be perceived and conceived in different ways. Creating policies for wellbeing in participatory arts, sport and physical activity requires the adoption of and support for multidisciplinary, cross-sector and coproduction approaches to design place-making to support wellbeing in effective and sustainable ways.
5. Attention should be paid to countering place inequality in promoting wellbeing and placemaking. It should be ensured that access to and involvement in places and spaces for participatory arts, sport and physical activity avoid forms of exclusion generated by design, practice and promotion, taking account of three interconnected recommendations:
 - i. In reshaping a space or place, consideration should be made for amplifying the sense of inclusivity characterising it, so that it can be reconstituted as a place associated with alternative, more positive meanings
 - ii. The creation of *safe spaces* for facilitating open, honest, transparent and authentic experiences, particularly for those facing ill physical and mental health or trauma, is an imperative for effective and sustained interventions
 - iii. Consideration should be made for addressing the stigmatising elements of place and space to resolve discriminatory practices and create environments that engender meaningful connection, value, celebrate diversity and offer support for those experiencing and/or creating stigma.
6. In evaluating the findings in this review, we have moderate confidence in the evidence for safe spaces and temporal aspects of place. This largely relates to the limited extent of the literature and to methodological issues in the conduct of the reported research. There is, therefore, considerable potential to generate a more robust evidence base for policy and practice in relation to these factors and their interconnections with belonging, community and therapeutic/sensory characteristics, especially for participatory arts, sport and physical activity intervention development and evaluation.

Synthesis of qualitative studies on place and space and participatory arts, sport or physical activity for enhancing wellbeing or alleviating loneliness across the adult life course (16+ years)

Introduction

Background

This qualitative review of place and space, wellbeing and loneliness, and taking part in participatory arts, sport or physical activity stems in part from a previous conceptual review of loneliness (Mansfield et al., 2019). An earlier review (Bagnall et al., 2018) focused on interventions seeking to boost social relations through the development and uses of community infrastructure (places and spaces), identifying such spatial locations as an important, and as yet far-from-understood, dimension of the debate on and research into wellbeing (<https://whatworkswellbeing.org/product/places-spaces-people-and-wellbeing/>). This new review also supports current priorities in UK policy and practice for understanding loneliness, poor social relations, and emotional factors that compromise wellbeing across the adult life course (<https://www.gov.uk/government/publications/a-connected-society-a-strategy-for-tackling-loneliness>). It has been produced as a collaborative form of stakeholder engagement with key UK government departments, local and regional public health experts and certain community groups. The review is needed because the full body of evidence on place and space in culture and sport is scattered across different disciplines, located variously, and it has not been systematically or fully examined in relation to wellbeing. There is a lack of clarity about how place and space as related to forms and contexts of cultural and sporting practice and activity should be addressed in policy and practice concerned with enhancing wellbeing and alleviating loneliness.

There are varying definitions and concepts of place and space in academic, policy and practice spheres. Traditional definitions of place distinguished the objective and naturalistic qualities of place from the subjective dimensions through which meaning is created (Entrikin, 1991). Typically, space is considered to be something abstract, without meaning, while place refers to a space with meaning. Current theoretical thinking reflects the complexities of place, considering the interplay between objective and subjective elements to include attention to cognitive, sensory and physical (bodily) experiences. These are central to how people make sense of and identify with any particular place. The physical and social environment and the way it is perceived and conceived has meaning for people through place-bound practices, relationships and processes, experienced at different temporal and spatial scales, be they personal, local, national or global scales (Lefebvre and Nicholson-Smith, 1991; Soja, 2008). Emotional, social, cultural and political meanings take shape in places

and spaces through cultural and sporting activities and via placemaking; multifaceted activities and collaborative processes, often in the creation of public spaces and using community asset and inspiration approaches. These can create feelings of belonging, community, contentment, escape and also feelings of exclusion, fear and anxiety. These meanings are made, transmitted, remade and negotiated through influence and power in everyday life (de Certeau, 1988). These influences are known to operate through cultural and sport-based participation (Tomlinson, 1998). In sporting and cultural interventions, the power and the status of a defined place, or the taken-for-granted authority of an official or a facilitator on how space might be occupied, have been underestimated, misread or simply ignored. A recognition of the spatial and place-related contexts in which activities occur makes place and space, and their interconnectivity, fundamental to any comprehensive understanding of how wellbeing through participatory arts, sport and physical activity can be promoted and sustained. This systematic review assessed all the relevant evidence on place and space, wellbeing and loneliness and participatory arts, sport and physical activity across the adult life course (16+ years). This report is a synthesis of the included qualitative studies.

The protocol for this review was registered on the international Prospective Register of Systematic Reviews (PROSPERO) (registration number: CRD42019142558). It is available at: https://www.crd.york.ac.uk/prospero/display_record.php?RecordID=142558.

Research question

How are space or place, intangible assets and volunteering conceptualised in reported qualitative research findings on participatory arts and sport/physical activity for enhancing wellbeing and alleviating loneliness across the adult life course (16+ years)?

Methodology

Overall review strategy

The SPIDER [Sample, Phenomenon of Interest, Design, Evaluation, Research Type] framework was employed to identify the relevant literature for inclusion (Cooke et al., 2012; Methley et al., 2014). This approach reflects current guidance on search strategies for qualitative evidence reviews (see for example Barnett-Page and Thomas, 2009; Noyes et al., 2008, 2015; Thomas and Harden, 2008; Walsh and Downe, 2005, and the Cochrane Qualitative and Implementation Methods Group

Guidance Series). The approach aligns with current debates on developing systematic reviews for social policy (Wallace et al., 2004; Munthe-Kass et al., 2019).

A combined search strategy was used to identify published papers on participatory arts, sport or physical activity, wellbeing (including the alleviation of loneliness) and place/space, intangible assets or volunteering.

Sample

The review included participants across the adult life course (16+ years), healthy or with any morbidity. This comprised any group or individual taking part in or watching sport or physical activity or participating in the arts, including theatre, dance, music and the visual or literary arts. Our protocol was to include studies from countries economically similar to the UK (as in other high-income countries with similar economic systems and in the same group as the UK in the OECD Development Assistance Committee categories) or with study populations that have similar socioeconomic status to the UK. Two studies were included that did not meet this inclusion criteria (with participants from Rwanda and Timor-Leste) because they included analysis on the phenomenon of interest that were highly relevant to the review.

Phenomena of interest

To be included, studies must have conceptualised space or place, intangible assets or volunteering in relation to participating in or watching sport/physical activity or to the participatory arts.

By 'sport/physical activity', we mean any kind of sport or physical exercise. By 'participatory arts', we mean the active participation in any form of creative activity using voice, body or inanimate objects to convey artistic expression.

By place and space, we refer to the interconnections between them because people are continually making sense of space in creating place. Place/space refers to the emotional, social, cultural and political meanings attached to physical and social environments and how they are shaped by experiences at personal, local, national and global levels. We include references to placemaking involving multifaceted activities and collaborative processes, often in the creation of public spaces and using community asset and inspiration approaches to enhance wellbeing.

This report includes a synthesis of qualitative evidence findings for space or place. A synthesis of qualitative evidence on intangible assets and volunteering will be reported separately on completion of the review process.

Design of the studies

We included empirical research published between 2009 and June, 2019. The included studies needed to have employed an identified and established qualitative method or technique or set of methods/techniques for the purposes of data collection and analysis. We identified relevant, published systematic reviews for the purposes of hand searching the reference lists. We hand searched the reference list of systematic reviews published between 2009 and 2019. Grey literature (2009 to 2019) in the form of evaluation reports was also included.

Evaluation

The included studies must have theoretically examined how place and space, intangible assets or volunteering contributes to enhancing wellbeing or alleviating loneliness when taking part in participatory arts, sport or physical activity.

Research type

We included qualitative or mixed methods studies employing a qualitative method or technique.

Search methods for the identification of reviews

Electronic searches

Electronic databases were searched using a combination of controlled vocabulary (MeSH) and free text terms. The search terms were incorporated to target qualitative studies exploring conceptualisations of space or place, intangible assets or volunteering and the evaluation of wellbeing or loneliness in relation to sport/physical activity or participatory arts. The search strategy was informed by expert consultation with policy makers, practitioners and researchers familiar with this field of study. The example search strategy can be found below. All database searches were based on this strategy, but which were appropriately revised to suit each database. The following databases were searched from 2009 to June 2019.

- PsycINFO
- Ovid Medline

- Eric
- Web of Science (Arts and Humanities Citation Index; Social Science Citation Index; Science Citation Index)
- Scopus
- PTSDPubs
- CINAHL Plus
- SportDiscus
- Performing Arts Periodicals Database
- Hospitality and Tourism Index

Demonstration search strategy

An example search strategy for Ovid Medline is shown below. Details of all search strings are available on request from the lead author.

(physical activity OR exercis* OR physical exertion OR sport* OR dance* OR walk* OR cycl* OR swim* OR meditati* OR participatory arts OR music OR sing* OR choir OR visual arts OR performing arts OR creative arts OR drama) AND (communit* OR neighbo* OR local OR town OR city OR village OR urban OR rural OR heritage OR physical environment OR landscape OR blue space OR green space OR public park OR playing field OR leisure centre)
OR
(physical activity OR exercis* OR physical exertion OR sport* OR dance* OR walk* OR cycl* OR swim* OR meditati* OR participatory arts OR music OR sing* OR choir OR visual arts OR performing arts OR creative arts OR drama) AND (traditional custom OR cultural practice OR cultural belief OR skill OR knowledge OR artefact OR cultural representation OR informal sport OR stories)
OR
(physical activity OR exercis* OR physical exertion OR sport* OR dance* OR walk* OR cycl* OR swim* OR meditati* OR participatory arts OR music OR sing* OR choir OR visual arts OR performing arts OR creative arts OR drama) AND (volunt* OR community support OR helping OR voluntary action OR volunteer carer OR community ambassador OR community champion OR voluntary service OR peer-to-peer OR peer)
AND
(lonel* OR solitude OR social isolation OR social relations OR well being OR well-being OR wellbeing OR happiness OR anxiety OR life satisfaction OR belonging OR self esteem) OR (quality ADJ life)

Searching other sources

The reference lists of all relevant reviews from 2009 to June 2019 were hand searched to identify additional relevant empirical evidence. A search of grey literature was conducted via an online call for evidence, employment of expert input, review of key sector websites and a Google search (key word search and reviewing titles of the first 100 hits). Grey literature (2009 to 2019) was included if it was an evaluation or report on empirical data examining space or place, taking part in participatory arts, sport or physical activity and an enhancement of wellbeing or

alleviation of loneliness. It also needed to include details of the authors (whether individuals, groups or organisations).

Identification of the studies for inclusion

The search results were independently checked by two reviewers, and the eligible studies were incorporated. Initially, the titles and abstracts of the identified studies were reviewed. If it was clear from these that the study did not meet the inclusion criteria, it was excluded. When it was unclear from the title and abstract whether a study was relevant, the full article was checked to confirm its eligibility. The eligibility or inclusion criteria were independently applied to the full papers of identified reviews by two reviewers. The eligibility criteria are summarised in Table 1. When two independent reviewers did not agree in their primary judgements, they discussed the conflict and attempted to reach a consensus. If they could not agree, a third member of the review team considered the title, and a majority decision was made. Only studies in the English language were included. A table of excluded studies can be found in Appendix 1.

Table 1 Eligibility criteria

SPIDER criteria	Inclusion	Exclusion
Participants	<ul style="list-style-type: none"> Any population group 16+ years Studies from countries economically like the UK (i.e. other high-income countries with similar economic systems) or with study populations that have a similar socioeconomic status to the UK 	<ul style="list-style-type: none"> Participants not meeting the age criteria (i.e. <16 years)
Phenomenon of Interest	<ul style="list-style-type: none"> Space or place, intangible assets or volunteering and sport/physical activity or participatory arts 	
Study Design	<ul style="list-style-type: none"> Empirical qualitative research, including qualitative components of mixed methods studies Grey literature: final evaluations or reports on empirical data, evaluations of wellbeing including loneliness as the central objective, conceptualising space or place, intangible assets or volunteering in relation to sports/physical activity or participatory arts, which includes details of authors (individuals, groups or organisations) Studies published between 2009 and June 2019 Grey literature published between 2009 and 2019 	
Evaluation	<ul style="list-style-type: none"> Subjective wellbeing including the alleviation of loneliness 	
Research Type	<ul style="list-style-type: none"> Qualitative or mixed methods including qualitative components 	<ul style="list-style-type: none"> Discussion articles, commentaries or opinion pieces not presenting empirical or conceptual research on loneliness Grey literature without details of authorship

Data collection and analysis

Data extraction and management (qualitative studies)

For this report, data were extracted independently by a reviewer using a standardised form (see Appendix 2) and cross-checked by a second reviewer. Discrepancies were resolved by consensus. The data extraction form included the following details relevant to the qualitative study designs and qualitative elements of mixed methods study designs:

- title, authors and year of publication
- the objectives of the study
- details of the included participants with a focus on protected characteristics and socio-economic status
- conceptualisation of wellbeing and/or loneliness
- evaluative and analytic approaches to wellbeing and place/space, intangible assets or volunteering, including relevant theories and concepts and/or processes associated with wellbeing
- ethical considerations
- study conclusions
- study limitations, gaps and conflicts of interest identified

For the grey literature, the data extraction included the following details from the PHE framework (Daykin and Joss, 2016):

- project description
- aims and objectives
- evaluation design
- data collection methods
- ethics and consent
- data analysis methods
- costs and budget
- key findings

Our protocol allowed us to contact the authors of the articles if the required information could not be extracted from the studies and if this was essential for interpretation of their results. We did not need to follow this procedure.

Assessment of methodological quality of included studies

To assess the methodological quality of the included published studies, two review authors independently applied the CASP quality checklist for the qualitative studies, as detailed in the What Works Centre for Wellbeing (WWCW) methods guide. The checklists were used to indicate if a specific study had been well designed, appropriately carried out and properly analysed. A summary of the quality scores for the published qualitative studies is presented in Table 2 (see ‘Supplementary Material’). The PHE Arts for Health and Wellbeing Evaluation Framework (Daykin and Joss, 2016) was used to extract data from the grey literature and judge the quality of it in terms of the appropriateness of the evaluation design, the rigour of the data collection, analysis and the precision of reporting, which takes a narrative format. A summary of quality ratings for the unpublished qualitative studies is presented in Table 3 (see ‘Supplementary Material’).

We then employed the Confidence in the Evidence of Reviews of Qualitative Research (CERQual) schema for judging how much confidence could be placed in the review findings developed through the synthesis.

Four components are used in the CERQual approach to assess confidence in the evidence for individual review findings: the methodological limitations, relevance, coherence and adequacy of data (Lewin et al., 2015). Categories of confidence in CERQual are high, moderate, low and very low. Table 4 identifies the review findings for the qualitative research in this report and provides a qualitative evidence profile alongside a detailed synthesis of evidence. Confidence was decreased if: there were serious or very serious limitations in the design or conduct of the study; the evidence was not relevant to the study objectives; the findings/conclusions were not supported by the evidence; or the data were of inferior quality and inadequate in supporting the findings. Confidence was increased if: the study was well designed with few limitations; the evidence was applicable to the context (the perspective or population, phenomenon of interest or setting) specified in the objectives; the findings/conclusions were supported by evidence and provided convincing explanations for patterns found; or the data supporting findings were of rich and high quality.

Data synthesis

A narrative approach was adopted to synthesise the findings. We conducted a thematic analysis of the evidence examining how place and space, intangible assets and volunteering influences wellbeing including loneliness through participatory arts, sport or physical activity. Thematic analysis of qualitative evidence is an established method that is explicit and allows a transparent audit trail in the analysis and

synthesis of data from primary studies. Thematic analysis in this review takes an inductive approach and broadly follows the process outlined by Thomas and Harden (2008) involving three stages: (i) the preliminary identification of themes in the data extraction process by all reviewers and coding of the extracted data (by LM and KG); (ii) the development and explanation of descriptive themes agreed by all reviewers; and (iii) the generation and definition of analytical and interpretive themes agreed by all reviewers.

Consultation with expert academic, systematic reviewers and non-academic stakeholders continued throughout the data synthesis stage to develop and establish appropriate reporting and translation strategies.

In this report, we present an evidence synthesis of the published and unpublished qualitative data which conceptualises space or place in understanding wellbeing or the alleviation of loneliness through taking part in participatory arts or sport or physical activity. The findings for intangible assets and volunteering will be reported separately. In addition, we tabulate the eligibility criteria, summaries of the characteristics of the included studies and quality judgement and identify and discuss important limitations and gaps within the evidence base.

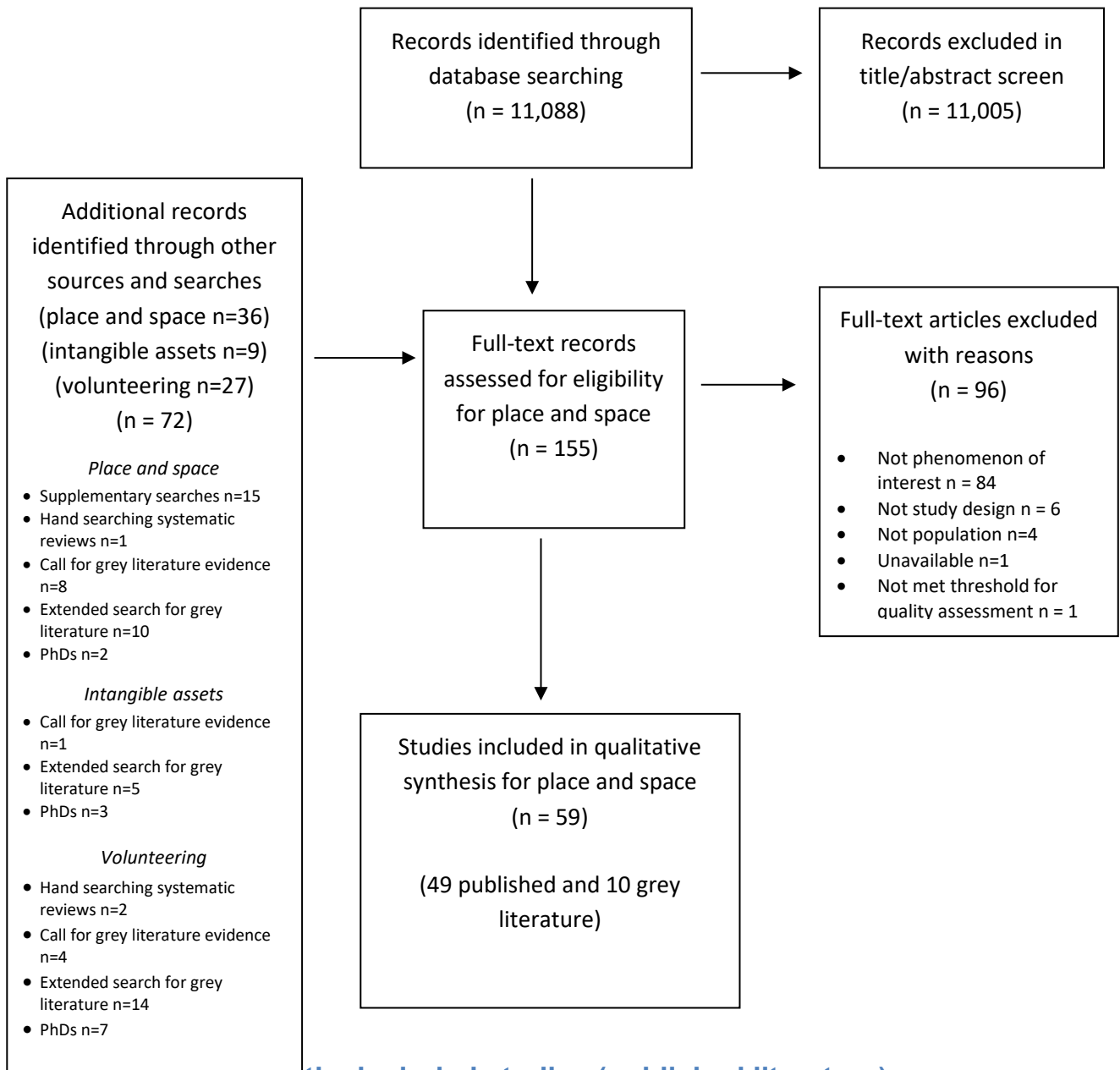
Results

Results of the searches (published literature) for space or place

After removal of duplicates, the electronic searches returned 11,088 records for screening. Of these, 83 were retained after the abstract and title screening, and 72 additional studies were identified through supplementary searches based on a refined definition of key terms (in consultation with expert stakeholders), hand searching of systematic review reference lists and grey literature searches (from calls for evidence on the WWCW website and extended online searches). 155 full texts were assessed for eligibility against the inclusion criteria. The full text screening process identified 59 qualitative studies (interviews, observations, document analysis, storytelling through music and dance and focus groups) for inclusion. These studies examined participatory arts and sport or physical activity and wellbeing including loneliness and place and space (49 published and 10 grey literature). The process of screening, inclusion of studies, synthesis and reporting for intangible assets and volunteering is due for completion by December 2019.

The list of excluded studies and reasons for exclusion can be found in Appendix 1. Studies excluded as 'not phenomenon of interest' but relevant to intangible assets or volunteering will be detailed in the reports due by December 2019. The search screening process and current status are illustrated in Figure 1.

Figure 1: PRISMA flow diagram of the search screening process



Characteristics of the included studies (published literature) on space or place

The included published studies examined place and space, wellbeing and loneliness in participatory arts, sport and physical activity in different ways and for diverse

population groups including: members of the general public living in both rural (countryside) and urban (built environment), communities with and without identified physical or mental health conditions, families, football fans, combat veterans, older people living in residential care and in the community, people with experience of mental health, genocide survivors, people in youth justice settings, immigrants, asylum seekers and refugees, people with experience of war, people with intellectual or physical impairment, people living with dementia and their care partners, people with chronic lung disease, action sports enthusiasts living in a natural disaster areas, unemployed people and people living in poverty.

The participants in the published studies took part in sport or physical activities including walking in both natural and urban settings in organised, peer-led groups or independently, watching or playing football, rugby, adaptive sports, action sports including surfing, skiing, mountain-biking, skateboarding and climbing, coastal swimming, road cycling and cycle tourism and wilderness camp activities. The participatory arts activities included: dance and Dance Movement Therapy, art-viewing and art-making in gallery settings, music-making, community singing, interaction with public artworks on an urban walk, adult creative arts classes and poetry workshops.

Thematic analysis of the evidence shows that place and space were conceptualised in the included studies through five analytical themes: (i) belonging and identity in place and space, (ii) places and spaces of community and locality, (iii) therapeutic and sensory spaces, (iv) safe spaces and (v) temporal aspects of place and space (place-temporality). The studies emphasised one of these five themes. Some considered the interconnections between two or more different themes. We define these analytical themes in the report and synthesise the evidence on them. These themes point to **processes** by which participatory arts and sport operate to enhance wellbeing and/or alleviate loneliness. They also indicate processes contributing to negative wellbeing experiences. Processes in this report may refer to a series of steps or to patterns of behaviours and emotions that lead to positive and negative wellbeing experiences. These can be personal and inter-personal but they also shape organisational rules, roles and imperatives as well as wider policy environments that affect wellbeing. The evidence in this review, then, has led us to define processes in terms of human relationships extending to emotional, social, cultural and organisational ways by which place/space connect with taking part in participatory arts or sports for enhancing wellbeing and/or alleviating loneliness - or not.

A summary of the characteristics of the included papers is presented in Table 4 (see 'Supplementary Material') and the references section. The list of excluded studies and reasons for exclusion can be found in Appendix 1.

Grey literature (unpublished) searches and results

The grey literature search was undertaken concurrently with the searches for the published studies. A call for grey literature evidence was advertised between April and June, 2019. The call requested reports evaluating and conceptualising space or place in the evaluation of wellbeing and the alleviation of loneliness in relation to participatory arts and sport/physical activity. Additionally, we conducted an extended systematic search of grey literature by employing expert input that assisted in identifying sources that might not be readily available by searching peer-reviewed literature (Benzies et al., 2006). Specifically, we: (i) contacted known experts in the field for recommendations of reports on loneliness; (ii) reviewed websites of organisations prioritising loneliness in their work; (iii) searched the EThOS website for unpublished PhD dissertations; and (iv) conducted a Google search with relevant key words and reviewed the first 100 results for relevance.

From the evidence call and extended grey literature search a total of 50 submissions were screened for eligibility. We included 10 reports from our grey literature search in this review. A table of excluded grey literature and reasons for exclusions can be found in Appendix 1. A summary of the characteristics of the grey literature included in this review can be found in the Table 4 (see 'Supplementary Material').

The participants in the grey literature studies included: members of the general public living in both rural and urban communities without identified physical or mental health conditions, people with addiction issues, people living with long term mental health, people living with dementia and their carers, older people living both in residential care and independently in the community and refugees. The participants took part in a range of sports and physical activities: group physical excursions and activities outdoors such as guided walks, nature talks, Tai Chi and mindfulness, street and board games and cycling. The participatory arts activities included: music, poetry, drama, visual arts, community singing, professionally facilitated or community led, object handling, educational and creative activities in a museum or heritage setting.

Overview of the quality of the included studies

The scores for the qualitative studies' quality checklists are presented in Table 3 (see 'Supplementary Material'). For the qualitative studies, the most frequent methodological weaknesses within the studies were the limited discussion of recruitment strategies, lack of rigor in the data analysis, lack of adequate discussion of the relationships between participants and researcher and the lack of detail regarding ethical issues. The results of the quality checklist for qualitative studies varied with the best scoring (meeting 8 out of the 8 criteria) in 5 sources [5,12,32,36,46] and the worst scoring (meeting 1 or 2 out of the 8 criteria) in one source. [19]

The use of the CERQual schema for judging the confidence in the findings from the synthesis of qualitative evidence results in a judgement of high confidence that taking part in meaningful and appropriate places and spaces for participatory arts, sport or physical activity can enhance wellbeing and potentially alleviate loneliness through developing a sense of belonging, identity and community. We can also have high confidence that the creation of therapeutic and sensory spaces for taking part contributes to enhanced wellbeing. The review reports a judgement of moderate confidence in ensuring there are safe spaces for taking part in arts, sport and physical activity that can lead to wellbeing benefits (e.g. feeling comfortable, confidence and worthwhile) including the alleviation of loneliness. A judgement of moderate confidence is also made about evidence for wellbeing enhancement in relation to patterns, timings and rhythms of movements and activities in certain places (i.e. when, how long, who with and activity types), and the ways that time and timing are significant to peoples' experiences (place-temporality). Moderate confidence judgements are due to moderate concerns with methodological limitations, coherence and adequacy. Most published studies obtained appropriate ethics approval although this was not always reported extensively. Methodological weaknesses of the studies included a lack of exact details of the researcher's role, potential bias and influence on sample recruitment, settings and responses of participants. The grey literature was of mixed quality with high quality reports including details of a methodological approach, theoretical analysis and recognition of limitations, and low quality (credibility) reports providing little detail of methods and commonly taking participant accounts at face value without theoretical analysis.

Using the PHE Arts for Health and Wellbeing Evaluation Framework, we gave a quality (credibility) rating of high, moderate or low to the grey literature. A summary of the quality assessment for the grey literature can be found in Table 3 (see 'Supplementary Material'). Of the ten included grey literature sources, evidence from four have high quality (credibility) due to the inclusion of a detailed description and theoretical reflection on methods, approach and limitations, attention to the assessment of quality for the qualitative elements, recognition of limitations and a theoretically informed analysis. Four are rated with moderate quality (credibility) due

to the inclusion of a description of the methods and approach, but with little detail on the analysis of the data. Two reports were rated with low quality (credibility) as they relied on face value reporting of participants' accounts, lacked an identification of the limitations and did not include a theoretically informed analysis.

Evidence on place and space and wellbeing and loneliness in participatory arts, sport or physical activity: a summary and synthesis of the findings

Study participants and participatory arts, sport and physical activities

The review includes published data from more than 1933 participants in twenty countries, and 789 participants included in the unpublished data from three countries. All participants were subjects in studies using qualitative research methods. In the published studies, the participants included: members of the general public living in both rural and urban communities without identified physical or mental health conditions; families; football fans; combat veterans; older people living in residential care and the community; people with experience of mental health; genocide survivors; people in youth justice settings; immigrants, asylum seekers and refugees; people with experience of war; people with intellectual or physical impairments; people living with dementia and their care partners; people with chronic lung disease; action sports enthusiasts living in a natural disaster area; unemployed people; and people living in poverty. These participants were involved in structured and informal sport or physical activities including: walking in natural and urban settings; watching or playing football, rugby; adaptive sports; action sports including surfing, skiing, mountain-biking, skateboarding and climbing; coastal swimming; road cycling and cycle tourism; and wilderness camp activities. The participatory arts participation included: dance and Dance Movement Therapy; art-viewing and art-making in a gallery setting; music-making; community singing; interaction with public artworks on an urban walk; adult creative arts classes; and poetry workshops.

In the unpublished (grey) literature, the participants included: members of the general public living in both rural and urban communities without identified physical or mental health conditions; people with addiction issues; people with experience of long-term mental health; people living with dementia and their care partners; older people living both in residential care and independently in the community; and refugees. These participants took part in sport and physical activities including: group physical excursions and activities outdoors such as guided walks; nature talks; Tai Chi and mindfulness; street and board games; and cycling. The participatory arts activities included: creative activities in participatory arts programmes such as music, poetry, drama, visual arts and community singing, all either professionally facilitated or community-led; and object-handling, education and creative activities in a museum or heritage setting.

Where demographic characteristics of participants were reported, this revealed a mix of gender, age (16 to 80 years), socio-economic and employment status, disability and ethnic backgrounds.

Synthesis of qualitative evidence

The fifty-nine qualitative studies included in this review focus on understanding and conceptualising place and space, wellbeing and loneliness in participatory arts, sport or physical activity. They do so in a range of theoretical ways using, overall, a wide variety of qualitative methods (namely interviews, observations, document analysis, storytelling through music and dance and focus groups). In synthesising the qualitative evidence, five key thematic areas and their findings are identified that concern the conceptualisation and understanding of place and space, wellbeing and loneliness through participatory arts, sport or physical activity; they further address established theoretical and conceptual concerns of place and space research: (i) belonging and identity in place and space, (ii) places and spaces of community and locality, (iii) therapeutic and sensory spaces, (iv) safe spaces and (v) temporal aspects of place and space (place-temporality).

These themes point to **processes** by which participatory arts and sport operate to enhance wellbeing and/or alleviate loneliness. They also indicate processes contributing to negative wellbeing experiences. Processes in this report may refer to a series of steps or to patterns of behaviours and emotions that lead to positive and negative wellbeing experiences. These can be personal and inter-personal but they also shape organisational rules, roles and imperatives as well as wider policy environments that affect wellbeing. The evidence in this review, then, has led us to define processes in terms of human relationships extending to emotional, social, cultural and organisational ways by which place/space connect with taking part in participatory arts or sports for enhancing wellbeing and/or alleviating loneliness - or not.

Analytical Themes: definitions

Belonging and identity in place and space

This theme refers to the role of the physical environment in the social and psychological development of peoples' identities, reflecting the theoretical concept of place identity. It refers to the way spaces are made into meaningful places through taking part in participatory arts, sport or physical activity. The theme includes evidence about the ways that knowledge and feelings develop through the experiences people have in physical spaces, and the way place can construct meaning, foster relationships and mediate change. It also includes the way that place and space provide for experiences of solitude for personal growth and

creativity, the remaking of self, future hopes or the reframing of one's life. It includes emphasis on taking part in new and enjoyable spaces with people you know and/or with new social contacts. The theme refers to both the ways people feel connected to and displaced from a place.

Places and spaces of community and locality

This theme refers to the collection of people in a place/space who share values, activities and/or experiences in common. Communities operate at many levels including globally and nationally, regionally and locally. This theme includes a focus on developing the local as a way of connecting with people who are similar and share positive, collective emotional experiences, interactions and relationships in a place/space (sometimes referred to as *communitas*). It includes issues of identity reinforcement, friendship, neighbourhood, physical attachments to a place and social environment (networks) and pride in a place. These community experiences may be both positive and negative, and they can be shaped by unequal relationships involving both inclusive and exclusive practices.

Therapeutic and sensory spaces

This theme refers to the ways that physical, social and psychological spaces are designed to promote healing and restorative experiences, or that are discovered for their healing capacities. It includes the ways that the senses: sight, sound, smell, taste and touch, contribute to the creation of spaces that stimulate embodied feelings, which could be pleasant and inviting or unpleasant and discordant. This will include time away from the norm, seeing place as a haven and providing an opportunity to be away from the everyday stresses of home or work. It further gives the opportunity to put traumatic experiences to one side. The theme includes a focus on place and space as a distraction and escape.

Safe spaces

This theme refers to the creation of spaces in which people feel confident that they will not be exposed to physical or emotional harm. It also refers to the challenge presented by spaces that can create or reinforce harm. Safe spaces are created to be free from bias, criticism, prejudice, discrimination, harassment and threatening actions. Safe spaces allow people to feel comfortable to discuss or reflect on sensitive issues. A safe space can facilitate honest, open, transparent and authentic experiences, often in a supported way.

Temporal aspects of place and space (place-temporality)

This theme refers to the patterns, timings and rhythms of movements and activities in places, and the ways that time and timing are significant to peoples' experiences. This theme includes the significance of the pace and tempo of activities, their

timings, the sense of time created in a place and also issues of seasonality, history, heritage, storytelling, memories and nostalgia.

For each review finding in this synthesis, CERqual has been applied. The qualitative evidence profile is presented in Table 5; we provide a narrative discussion of the findings, and the levels of confidence we have in them.

Table 5 CERQual qualitative evidence profile

Review findings	Studies contributing to the review findings	Methodological limitations	Relevance	Coherence	Adequacy of data	Overall CERQual assessment of confidence	Explanation of judgement
Belonging and identity in place and space (n=33)	1,2,4,6,10,12,13,15,16,17,18,19,20,23,25,,27,29,30,31,34,35,36,38,39,40,42,46,50,52,54,55,57	Minor concerns (5 studies with several limitations, 15 studies with minor methodological limitations and 1 study with maximum quality; the grey literature has 4 high, 4 moderate and 2 low)	Minor concerns for relevance (all studies examined the phenomenon of interest)	Minor concerns for coherence (the data were reasonably consistent within the studies, with low consistency across studies on population and context)	Minor concerns about adequacy (7 studies have thin data, 23 a moderate richness of data: the grey literature has 4 high, 4 moderate and 2 with a low richness of data)	High confidence	Graded as high confidence due to methodological strengths, relevance and adequacy
Places and spaces of community, communitas and locality (n=24)	1,3,12,15,16,19,20,26,28,29,32,33,35,36,39,45,49,50,51,52,54,55,56,57,58,59	Minor concerns (6 studies with several limitations, 8 studies with minor methodological limitations and 3 studies with maximum quality; the grey literature has 3 high, 4 moderate and 2 low)	Minor concerns for relevance (all studies examined the phenomenon of interest)	Minor concerns for coherence (the data are reasonably consistent within the studies, with a low consistency across studies on population and context)	Minor concerns about adequacy (7 studies have thin data, 23 a moderate richness of data: the grey literature has 4 high, 4 moderate and 2 with a low richness of data)	High confidence	Graded as high confidence due to methodological strengths, relevance and adequacy

Therapeutic and sensory spaces (n=24)	2, 4, 5, 7, 11, 13, 16, 21, 22, 23, 25, 27, 29, 32, 33, 37, 41, 42, 44, 45, 48, 53, 58, 59	Minor concerns (4 studies have several limitations, 15 studies with minor methodological limitations and 2 studies with maximum quality; the grey literature has 3 high)	Minor concerns for relevance (all studies examined the phenomenon of interest)	Minor concerns for coherence (the data are reasonably consistent within the studies, with a low consistency across studies in terms of population and context)	Minor concerns about adequacy (7 studies have thin data, 23 a moderate richness of data; the grey literature has 4 high, 4 moderate and 2 with a low richness of data)	High confidence	Graded as high confidence due to methodological strengths, relevance and adequacy
Safe spaces (n=8)	7,8,9,14,30,32, 39 51	Moderate concerns (2 studies have several limitations, 5 studies with minor methodological limitations and 1 with maximum quality)	Minor concerns for relevance (all studies examined the phenomenon of interest)	Moderate concerns for coherence (the data are limited on consistency within the studies, with a low consistency across studies in terms of population and context)	Moderate concerns about adequacy (2 studies have thin data and 6 with a moderate richness)	Moderate confidence	Graded as moderate confidence due to moderate concerns with methodological limits, coherence and adequacy
Temporal aspects of place and space (place-temporality) (n=5)	8, 11, 25, 42, 44	Moderate concerns (2 studies have several limitations, 2 studies with minor methodological limitations and 1 with maximum quality)	Minor concerns for relevance (all studies examined the phenomenon of interest)	Moderate concerns for coherence (the data are limited on consistency within the studies, with a low consistency across studies in terms of population and context)	Moderate concerns about adequacy (2 studies have thin data and 3 with a moderate richness)	Moderate Confidence	Graded as moderate confidence due to moderate concerns with methodological limits, coherence and adequacy

Theme 1: Belonging and identity in place and space

Thirty-three of the fifty-nine included studies examined the relationship between wellbeing or loneliness, place and space and issues of belonging and identity.

[1,2,4,6,10,12,13,15, 16, 17,18, 19, 20, 23, 25, 27, 29, 30, 31, 34, 35, 36, 38, 39, 40, 42, 46, 50, 52, 54, 55, 57] In these studies, belonging is explained in terms of the role of the physical environment in the social and psychological development of peoples' identities. This notion of belonging is anchored in the theoretical concept of place identity. The effects of place and space on belonging and identities are explained in the included studies in terms of their role in enhancing wellbeing or alleviating loneliness. This theme includes evidence about the awakening of feelings and affective mechanisms as they occur through the experiences people have in physical places and spaces. There is evidence about the way place constructs meaning by fostering relationships and mediating change through attachment, association and/or disassociation to a place and space. Some included studies emphasise processes of discovering the self through place and space, generated by experiences connected to the remaking or reframing of personal identity and solitude for personal growth and creativity.

Awakening feelings through participatory arts, sport or physical activity in place and space.

Eight included studies identify and discuss the ways that place and space awaken feelings, thus constituting an affective mechanism via which wellbeing benefits are experienced through a sense of belonging when taking part in participatory arts and sport or physical activity. [4, 10, 16, 19, 20, 23, 24, 42] Four of these studies emphasise that public spaces have the capacity to evoke positive feelings and enhance wellbeing through inclusive practices. [4, 10, 16, 24] A study of urban walking illustrated the ways that physical places trigger a range of emotions including excitement, happiness and nostalgia, and fear and discomfort. [4] Positive feelings were stimulated by an array of experiences including seeing a well-kept garden, colour and animation in the street or a personally meaningful shop or building. Negative feelings were experienced in areas of little light or where there were few people and activities taking place. A study with migrant buskers in Stockholm, Sweden illustrated that the music played by the buskers animated the urban place and space providing for soothing, comforting, entrancing and convivial feelings in those who experienced the performances. [10] Buskers playing cultural instruments were associated with a more inclusive and multicultural city space, and their performances created moments of togetherness. Positive feelings connected to inclusivity i.e feeling a part of society or having a sense one's life is worthwhile and/or has purpose or is valued were also reported in a study of older people with early onset of dementia who took part in urban walks to view and experience public artwork. [16] Public urban spaces were

explained as an alternative to institutional or clinical spaces most often experienced by this participant group.

Experiencing public artwork through the physical activity of walking evoked shared feelings of curiosity and learning as well as freedom and trust that underpin the creation of inclusive spaces. A study of older-age theatre goers with long-term involvement in a local theatre reported that being a part of the space, its people and activities created feelings of security, which had the potential to enhance wellbeing through feelings of inclusivity.^[24] Two studies explored the ways that loneliness was alleviated via igniting an affective sense of belonging in participatory arts' places and spaces.^[19,20] In one theatre project with those living in poverty in Singapore, the focus was on bringing people together and providing opportunities to share stories and actively participate in the creation of a culturally informed arts space and theatre production. The participatory arts activity led to feelings of kinship in the participants, which contributed to positive emotional aspects of belonging and the alleviation of loneliness.^[19]

In a community singing project for older people, the opportunity for a dedicated place and space for choir activities and the sense of belonging created through taking part was identified as important to alleviating loneliness.^[20] The affective character of belonging was emphasised by the participants who associated positive emotions including feelings of enjoyment, relaxation, pleasure, purpose and confidence with the spaces and activities connected to the singing activities. Another community singing project with people living with COPD illustrated that positive emotions are not necessarily immediately felt in spaces dedicated to participatory arts activities, but that they develop through more sustained involvement in the space and with other participants.^[28] The participants initially felt anxious about going to and taking part in community singing as the space was unfamiliar, and they were concerned about their capabilities and capacity to sing. However, the singing activities did create a sense of comfort and security in which participants felt cared for and able to experience positive feelings of relaxation, enjoyment, personal control and confidence, contributing to their sense of belonging to the group.

One study examined sport as a vehicle for creating spaces of belonging for recovery from post-disaster in the case of the 2011 Christchurch, New Zealand earthquake. Taking part in recreational action sports, including sites for surfing, skateboarding, climbing and mountain biking, is described as a source for the creation of positive affective connections to spaces, places and people in situations where natural disasters have taken place.^[42] Sport allowed participants to variously feel that they could escape from the visceral and psychological experience of a disaster space and momentarily de-stress or escape from negative feelings.

Attachment, association and/or disassociation through participatory arts and sport/physical activity in place and space

Eleven included studies examine the ways that people experience particular feelings of attachment, association and/or disconnection in places and spaces where participatory arts and sport or physical activity take place, which contribute to their overall sense of wellbeing. [1,4,13, 19,31,34,42, 43,55,56,59] Place attachment is connected to the emotions that are evoked in places and spaces as well as the social relations and experiences that give places and spaces meaning. Four studies show the ways that participatory arts and sport/physical activity can enable reflective opportunities that recreate attachment to place and space. [1, 4, 13, 31] One study using dance to represent local, rural community issues connected to masculinity and rural life identified that strong attachments to the ways of living and working in these communities created a sense of belonging through pride in a place. [1] Personal memories and reminders of routines (in the case of graduations, workplaces and places where families had been) made places familiar and stimulated attachment, connection and belonging in a study of urban walking. [4] For people migrating to a place, memories stimulated about a country of origin as they walked (for example, through food shops or when catching sight of recognisable cultural artefacts) could enable positive associations with and an attachment to place. The wellbeing benefits of being in and feeling attached or connected to nature in urban settings were identified in three included studies. [2, 13, 31] For families hiking with young children, being active in nature contributed to parental wellbeing through feelings of spending time together and creating shared family memories. [2] A project examining the use of urban green space with low income communities reported that positive attachment to green space was linked to a sense of learning and education about nature and adventurous and play activities. [13] Additionally, a study on walking groups delivered for cardiac rehabilitation and school health promotion illustrated that feeling able to connect with nature and seeing woodland and green space through walking was conducive to feeling pleasure in a peaceful environment.[31]

Four other studies offer more developed theoretical insights on place attachment to illustrate the complex ways that belonging is negotiated through attachment to place involving feelings of disassociation and re-association through participatory arts or sporting practices. [42, 43, 44, 55, 59] The analysis of the experiences of recreational surfers, skateboarders, climbers and mountain bikers after the 2011 Christchurch, New Zealand earthquake already reported above also identified that taking part allowed them to re-appropriate, re-purpose and restore damaged spaces and find new excitement through taking part in them. [42] Some participants took the opportunity to travel to other places with their sporting communities after the earthquake, creating alternative attachments to different places by renewing their social relationships. However, anxieties and fears were also evoked by being

separated from home and family in the post-disaster period; also, strong emotions of loss of place were expressed by participants, as they explained the destruction and disruption of place and space. Three studies highlighting dissociation and reassociation as central to understanding belonging and place included participants from marginalised groups. A city-based community dance project with those experiencing racism, isolation and poverty enabled participants to participate in a performance that represented their lives in a transformative way. ^[43] The performance narrated the possibilities of challenging difficult life circumstances, seeking to cultivate a more positive feeling or sense of attachment to the city and representing the city-space as a place to live a good life.

The transformational potential of participatory arts was also identified in a study with refugee youth in the UK and Australia. ^[55] Arts activities allowed reflection about feelings of disassociation and not belonging. The alleviation of loneliness and enhanced sense of wellbeing was connected to the remaking of attachment to new spaces in the process of taking part. In one study seeking to improve access to natural environments through guided walks, nature talks, wildflower planting, Tai Chi, art and creative activities, mindfulness, poetry and photography, association to a new activity in a new (nature) space was reported as important for enhancing wellbeing and alleviating loneliness. ^[57] Participants from both affluent and disadvantaged backgrounds and those with strong and weak social networks identified that taking part enabled them to grow in confidence in a new place, to experience pleasure from the activities and the space and to take ownership of a place to which they would not normally feel they belonged. Attachment effects were also examined in relation to the importance of personal and communal commitment to a place in a study of coastal towns undergoing regeneration. ^[59] Barriers to engagement in cultural activities included perceptions of class-centric provision, a lack of education, limited access to resources and the effect of the national arts provision policy. However, remaking and regenerating places and providing opportunities to explore new spaces through cultural activities allowed participants to feel connected, commit to a changing place and to gain a sense of social enrichment for wellbeing enhancement.

Discovering the self and negotiating identities through participatory arts and sport/physical activity in place and space

Twenty-two included studies examine the ways that the place and space in which people take part in participatory arts and sport or physical activity allow discovery, rediscovery or insight into one's personal character (identity or the self). Fourteen of these papers illustrated that cultural and sporting spaces and activities allowed participants and those taking part in them to reflect on their role or position in society or a group, and to reconsider their personal values, beliefs and sense of self and/or

views about others. [6, 10, 13, 16, 17, 18, 25, 29, 30, 36, 38, 40, 43, 50] One study showed that older Taiwanese men (with an average age of 63 years) continuing to play Rugby Union in a club were able to negotiate their ageing identities, challenging ideas about sport participation and old age and maintaining a sense of wellbeing through their involvement in a sports club. [6] The sense of security that the participants expressed in their masculine identity was connected to the long-term friendships and new social connections they could make through remaining involved in the rugby club environment.

The wellbeing benefits of routine physical activity and taking part in established social groups was also reported in a study of predominantly middle-class African-American men and women who swim, exercise and socialise together during the summer at a particular beach on Martha's Vineyard. [29] Whilst some African-American members in the wider community reported feeling alienated because they were not involved in the swim and unable to access this privileged space, participants in the study predominantly experienced a sense of racial pride by engaging in fun, playful and shared activities in a place where they could rest and relax. They were able to access valued social capital resources (i.e. shared interpersonal experiences central to the functioning of a group) and memorialise the space as a racial and social one.

For those living in disadvantaged communities likely to be on a low income, two studies reported wellbeing benefits through the promotion and engagement of physical activity and participatory arts in urban spaces. [13, 43] Spending time in urban green space (parks) either alone in solitude or connecting with family and friends (depending on preference) and learning about nature was considered as a route to improved wellbeing through reflection about one's own life. [13] Taking part in physical activity in green space allowed participants to consider how to overcome their difficulties and engage in something adventurous. Similarly, the transformative potential of community dance was reported as a way for excluded urban communities, experiencing racism, isolation and/or poverty to reflect on and represent themselves in a more self-defined way. [43]

Participatory arts and sporting spaces for self-discovery in refugee or migrant groups were identified in the included studies. [10, 30, 36, 38] Musical performances of migrant buskers were found to create moments of reflection about the multicultural nature of urban space for those listening to them. [10] Taking part in choirs was reported as a way for refugees to both connect to feelings of home through singing traditional cultural pieces and to negotiate change and a new identity by learning about and connecting to others through song. [30] Leisure activities (e.g. swimming, roller skating and outside play) and sport (football) were also found to create a space and

activity experience, enabling cross-cultural sharing in migrant groups, adaptation to immigration processes and the new environment by feeling more familiar with the host culture and positive feelings of hope for the future. ^[36, 38]

Mental health issues were the focus of three studies examining self-discovery through participatory arts, sport and physical activity. ^[16, 25, 40, 50] One urban walking study with long-term users of mental health services reported the importance of walking as a way to remake and reconnect to everyday space for the participants. ^[25] Led walks in urban spaces outside of formal institutional boundaries (e.g. hospitals and other clinical settings) were a way for participants to regain a sense of an authentic self in an informal and safe space through physical activity and also via learning about the history and the environment it took place in. In a mental health and forestry initiative for young people with addiction and mental health issues, rural group-walking alleviated loneliness in participants through social interactions and friendships leading to feelings of security and a reported transformation of self in relation to rural (forest) spaces. ^[50] Two studies with older participants living with dementia reported the wellbeing benefits associated with provided spaces for physical activity and participatory arts. ^[16, 40] Walking through public art located in urban environments allowed participants in one of these studies to rediscover themselves through feelings of curiosity and learning gained by moving through and around the art enabling them to feel like legitimate social citizens. ^[16] Self-discovery through the creation of a space and opportunities for self-expression was also reported in a study of collaborative poetry readings with those living with dementia in care homes. ^[40]

One study on adaptive sports for people living with physical impairments emphasised the importance of spatial and activity adaptation in ensuring wellbeing outcomes. ^[18] Participants reported that through encouragement and support from staff and peers involved in sports projects, they were able to participate in sports including wheelchair sports, skiing and water sports. They could, thus, experience opportunities to express a kind of boldness and a desire to break out of their limited personal world. The physical environment is commonly known to be a barrier to sport for people living with physical impairment, but in this study, positive aspects of location were reported. These sporting places and spaces were regarded as transcending the identity of disabled athlete, reframing disability as a unique ability, thus alleviating loneliness.

In ten studies about self-discovery, personal goals, visions, expectations or motives were influenced by the places and spaces in which participatory arts and sport or physical activity took place. ^[15, 16, 17, 25, 39, 42, 46, 52, 54, 57] Taking part in dance programmes elicited a sense and vision for a renewed self-worth and confidence for

older people ^[17], as did involvement in gospel choirs for older people ^[15] and a community choir for adults including those with chronic health conditions. ^[39] For those living with dementia, walking through and experiencing public art provided time and space to rediscover and reframe a positive sense of self as an acceptable social citizen. ^[16]

A community rugby programme for unemployed participants which combined sporting activity with a space and activities for personal skill development enabled participants to improve their confidence and skills in preparation for a job. ^[46] In a cycling programme for older people, becoming mobile and being able to experience places and spaces in a new way allowed them to engage in their environment, which improved their confidence and also developed a renewed motivation and sense of civic participation in older age. ^[54] Walking was identified as an activity conducive to creating meaning in spaces that enable people to reflect, rediscover a positive sense of identity and feel wellbeing benefits. Walking through historic landscapes (Stonehenge and Avebury) allowed those living with mental health conditions to feel special, connected to each other and to a spiritual, historic outdoor space. It also enabled them to express themselves although it was noted that the participants had a fear for the future when the project ended. ^[52]

In the study of the 2011 Christchurch, New Zealand earthquake, sporting activity was also viewed by participants as a way to recover, rebuild and rediscover a positive sense of identity and attachment to place. ^[42] A walking and talking programme for those with mental health conditions also identified physical activity and conversation for redeveloping an authentic identity outside of clinical spaces and in spaces that were more fluid and open, which did not define the participants solely by their mental health condition. ^[25] In a care home setting, one study illustrated that, through new shared rituals, changing the arrangements and dynamics of the care home space, music-making could create a place/space in which participants could reshape and redefine the place that they belonged to and develop more positive feelings of wellbeing. ^[57]

Taking part in participatory arts and sport or physical activity was explained by participants as a way of experiencing solitude in a personally creative space or place in four studies. ^[12, 13, 25, 27] In all these studies, an outdoor place and space for walking was illustrated as central to improving wellbeing. In a study of older people involved in led rural walks, the environment stimulated their senses and capacity to feel the terrain underneath their feet or the air around them, creating a connection to nature and a feeling of freedom. They could further choose whether to experience the positive feelings alone or with the group. ^[12] Similarly, an adult walking group taking place in a woodland on the edge of an urban environment ^[27] and a study of

activities including walking taking place in urban parks ^[13] reported that such spaces afforded participants the opportunity to choose to walk alone, to feel free to belong to nature and experience solitude as a way to reinvigorate and reflect. Urban walking for those living with a mental health condition enabled participants to take part in a space that provided a respite from clinical settings and was experienced as belonging to a place of personal sanctuary, rather than one of medical care. ^[25]

Theme 2: Places and spaces of community and locality

Twenty-six of the fifty-nine included studies contributed to an understanding of the influence of community and locality on wellbeing or loneliness in participatory arts, sport or physical activity including seventeen peer reviewed studies and nine grey literature evaluation reports. ^[1,3,12,15,16,19,20,26,28,29,32,33,35,36,39,45,49,50,51,52, 54,55,56,57,58,59]

The studies encompass different kinds of contexts, but emphasise the wellbeing benefits of physical spaces and communities forged from shared interests, experiences and activities. Within these contexts, various factors can shape loneliness and wellbeing, such as the availability of assets and opportunities, divisions based on class, gender, ethnicity and ideology, experiences of ageing, the presence of physical and mental health conditions and the effects of migration and war. Community experiences may be both positive and negative and can be shaped by unequal relationships involving both inclusive and exclusive practices. This theme includes evidence about bonding through shared activities, identities and community spirit, bridging through participatory arts, sport and physical activity, the importance of communal public spaces for taking part and the value of nature spaces for engaging in sport and physical activities. It also includes evidence to show that there are challenges for communities created through place and space. These include difficulties in access associated with location and the arrangements of rural and urban spaces, the effects of war, conflict and political ideology, experiences of being part of a minority group, living with a poor health condition and ageing.

Places and spaces for bonding through shared activities, identities and community spirit

Bonding through shared participatory arts, sport and physical activities

The notion of bonding and, to a lesser degree, bridging social capital underpins these studies (Putnam, 2000, 2002). Bonding refers to building connections with people who share similar experiences while bridging involves extending links to wider groups of people that might mitigate loneliness by enabling access to

unfamiliar resources and opportunities. All the studies within this theme reported processes of bonding, frequently referring to processes of social interaction that enabled friendships and meaningful connections to grow. Some examples of bonding processes include: increased interaction and connection among young people taking part in an outdoor wilderness camp; ^[49] experiencing fun and a sense of togetherness in a community dance project; ^[1] making friends and increasing social interaction among participants in a community arts project in a disadvantaged urban community; ^[26] feelings of connection and solidarity reported by people with mental health conditions taking part in a cycling project; ^[32] forming new friendships in a rural activities group for people with addiction and mental health issues or who have been in prison; ^[50] and a sense of togetherness and musical connection among participants in a music project in care home settings. ^[57]

Bonding through shared identities and community spirit

Beyond individual friendships and the provision of mutual support, bonding processes included developing shared identities and fostering community spirit and civic participation. ^[52] Activities such as dancing, singing, creative arts, cycling and outdoor leisure can serve to validate past and current identities as well as engender pride in the community. ^[1, 15, 16, 20, 28, 29, 32, 33, 45] A sense of belonging and group membership can be sometimes affirmed through symbolic and ritual or routine practices. ^[55] These include storytelling ^[1] and the performance of valued skills such as music. ^[15] As well as strengthening relationships, activities such as cycling can foster a sense of civic participation and community support. ^[54]

Bonding is sometimes described in the evidence as identifying with a group in a tribal sense. ^[50] Bonding processes can emphasise similarities between people and create in-group identities ^[33] although they can also involve activities that are physically or psychologically challenging for some participants ^[52] who may feel they lack the competence to take part, which can lead to some people being alienated from group events, activities and social gatherings. ^[29]

Places and spaces for bridging through participatory arts, sport and physical activity

Bridging through participatory arts, sport and physical activity was also reported in the evidence, sometimes as a means of countering potentially negative outcomes from bonding such as the creation of in-groups and exclusionary practices. Bridging processes were reported for participatory arts and sporting activities, and across the range of places and spaces. Bonding and bridging processes were noted as happening simultaneously to people taking part in the same group activities.

In a study of community singing, in-group identities were reinforced in older female migrants in Australia, but bridging processes were also reported as a counter to such potentially negative experiences for some participants. ^[20] Bridging included sharing cultural heritage through performances, which helped bridge the gap between participants' musical preferences and those of their families and younger generations. Another study identified repertoire (a stock of performance items) as a bonding tool, with both African American gospel music and South African freedom songs used to enable participants in a choir project to widen their community connections. ^[15] Taking part in adult learning creative classes facilitated new connections and enabled participants to widen their knowledge and experience of local events, hence the project promoted community engagement, integration and social cohesion through bonding and bridging processes. ^[28] Older participants in a rural walking group gained access to new spaces for both bonding and bridging. ^[12] A study of a singing project with the Aboriginal and Torres Strait Islander community in Australia reported that participation created a space for bonding and for social and ecological resilience in participants which in turn strengthened their access to social support from family, community and local health services. ^[39] A study of leisure experiences of Afghan refugees in Canada reported that leisure can help to build connections to family, friends and community (bonding) as well as promoting cross-cultural sharing and adaptation to the host culture (bridging). ^[36]

The evidence shows that bridging is an important dimension of participatory arts and sport in communities and places and spaces affected by war, conflict and political ideology. A study of a football project for Somali refugees reported both bonding and bridging for example by linking members of the Somali community to other African groups and helping to overcome disruptions caused by war. ^[35] A study of a community theatre project in a disadvantaged community in Singapore found that participation provides a space and set of activities that enable participants to bond by sharing stories and difficult experiences. ^[19] The project also created a platform to assert political rights and to engage as cultural citizens. These studies point to the complexity of bonding and bridging processes. A study reports on the changes following the Good Friday Agreement in 1988, which led to a loyalist-identified football club instituting education and community arts to engender positive community relations and openness. While football can be a cultural arena in which entrenched identities and ideologies are (re)produced, changing social and political circumstances can engender more fluid expressions of identity, making football a tool for bridging, for making sense of shifting forms of community identity. The study suggests that sectarian identities formed in place and space are complex spectrums of ideas, rather than cohesive ideologies.^[3]

Communal public spaces: access, control and infrastructure

The importance of availability, access to and a sense of ownership of communal public spaces such as libraries, community centres, parks and museums emerged from several studies. Regarding access, a study of a weekly walking group for older people in a rural community in the UK found that many had mobility impairments that limited their opportunity to access outdoor spaces. ^[12] Access and mobility can be issues in urban communities; for example, one study reported that older residents in a disadvantaged urban community in the UK were reluctant to leave their local area where they felt familiar and comfortable. ^[26] However, one study reported that outdoor cycling environments, organised and delivered to the needs of participants, provided a valued alternative to the clinical space for people with mental health conditions. ^[32] A place and space was created where participants reported that they could be together with like-minded people in a non-stigmatising environment.

Institutional spaces including hospitals and care homes often present challenges, such as crowding with furniture and objects that make it difficult to create intimacy and connection between residents. ^[57] Much research on dementia care takes place in indoor institutional places and spaces. One study emphasised the importance of enabling people with dementia to access outdoor public spaces where they could experience public art and a sense of being included in the community. ^[16] An evaluation of a UK museum-based social prescribing programme for socially isolated older people reported that the project enabled participants to gain confidence in navigating the museum space and taking ownership of the space for their own purposes. ^[58] Cultural and sporting activity groups can also take control of physical spaces to create supportive environments for themselves. For example, a study of African-American men and women who congregated at a swimming beach were reported as creating an egalitarian space in which they could escape from daily pressures, enjoy activities and access valued social capital resources. ^[29]

As well as addressing access issues, these studies point to the importance of infrastructure, resources and policies that support cultural and sport engagement. The authors of a study of a community dance programme in a rural community Western Australia stressed the need for building community assets and creating sustainable programmes that support local participation. ^[1] An evaluation of a community arts programme in the UK stressed the importance of involving local people in design and programming. ^[51] An evaluation of culture-led community regeneration programmes in UK coastal towns reported that participants gained a stronger attachment to place as well as social enrichment and connectedness through their involvement. ^[59] The authors stress the importance of overcoming barriers to engagement including perceptions of class-centric design and delivery of

activity, education, access to resources and the effects of national arts provision policy.

The value of nature, blue and green spaces for sport and physical activity

The value of nature, including blue and green spaces, was reported in five included studies. [12, 45, 49, 50, 56] Whilst not all studies discussed the term loneliness directly, the focus on social relations and connections suggests that loneliness can be alleviated by being outdoors and interacting with nature. A study of young adults taking part in a wilderness camp in the USA reported that the natural environment fostered social connections by reducing barriers created by activities such as internet and social media use and countering what the authors explain as the negative effects of not being in nature ('nature deficit disorder'). [49] Nature-based activity was explained as a way to encourage interaction, deep connections and a sense of community amongst young participants. An evaluation of an outdoor activities project based in the urban fringes and with communities living in deprivation in southern England reported that walking in nature afforded participants who may have rarely experienced 'natural environment' opportunities to experience the wonder of nature, develop social connections and address issues of loneliness and isolation. [56] Being able to explore nature provided a sense of adventure, building confidence and positive community bonds. Older participants in a rural walking group gained access to a new outdoor space making connections with others, building a sense of community and taking opportunities for reflection and personal growth. [12] A German study canvassed 113 visitors at open blue and green spaces in high-density cities and reported similarities and differences between these types of spaces, which can affect loneliness in different ways. For example, green spaces seemed to be more restful, encouraging positive experiences of solitude while urban blue spaces encouraged symbolic and social activities, fostering emotional bonding. [45]

Theme 3: Therapeutic and sensory spaces

Twenty-four of the fifty-nine included studies explored the way in which place and space may be experienced through the senses, often for therapeutic effect. [2, 4, 5, 7, 11, 13, 16, 21, 22, 23, 25, 27, 29, 32, 33, 37, 41, 42, 44, 45, 48, 53, 58, 59] In combination with sport/physical activity or participatory arts, places and spaces are shown to enable experience that distracts or offers escape from everyday stresses, roles or responsibilities. There is evidence about the way in which these kinds of sensory experience enable people to recover or find respite from distressing experience by connecting with others and affirming or re-affirming a sense of self. Some of these studies examine ideas about sensory spaces in participatory arts, sport and physical activity. They do so by considering the role of material, aesthetic or social elements of place and space and the impact of becoming aware of bodily sensations in triggering psychological or

emotional associative responses, both pleasant or discomforting. These can be shared and foster relationships and connection, but they can also provide opportunity for reflection in solitude. While the natural environment is of particular interest to some study authors, the significance of sensory and therapeutic spaces in urban and built environments is also explored.

Place and spaces to escape through participatory arts, sport and physical activity

The role of place and space in relation to physical activity was examined for its capacity to provide escape from life's stresses and its accompanying roles and responsibilities. This was particularly associated with the way in which certain places and spaces could enable positive experiences of solitude, from which people might return to everyday life feeling relieved or restored [4, 13, 21, 25, 27, 37, 45] This potential was frequently associated with natural environments, [21, 27, 29, 32, 33, 37] but it was also described in relation to urban streets [4, 25] and urban green and blue spaces. [13, 41, 45] Peri-urban woodland (woodland on the edge of urban environments) was the setting for one study, perceived as offering particular opportunities for those living in disadvantage, or who had little opportunity to engage with nature because of the contrast afforded with neighbouring urban spaces. [27] Restorative feelings were sometimes connected to an engagement with the aesthetic characteristics or 'beauty' of the landscape. [21, 27] However, in one study examining adult participants' engagement in leisure walking, beautiful scenery was described as of secondary importance to the opportunities it offered for introspection, for physicality (being active and connected to nature) and for social interaction. [37] It is, therefore, notable that a space might be valued simultaneously for the way in which it enables escape or solitude, and for its encouragement of social interaction and connection, depending on the kind of activity in which participants were engaged. [13, 27, 37, 41]

Evidence from these studies suggests that people experienced social spaces for culture and sport activities in ways that allowed them to connect with others, but to also feel a form of escape. A walk and talk group for long-term mental health service users in a UK inner city, for example, allowed participants to engage in shared and personally meaningful activity whilst it also gave opportunities for sanctuary and respite in an everyday space that was not a clinical environment. [25] The non-stigmatising and non-clinical space afforded by an outdoor cycling programme for people living with mental illness, created opportunities for social relations that were therapeutic for them and contributed to a sense of being cared for. [32] A sociable space characterised by pleasurable activity and conversation was created as the result of a group of predominantly female and middle class African-Americans habitually swimming, exercising and socialising together during their holidays near a beach that had previously been a site of racial segregation. [29] In this space,

participants were freed from the stresses required to maintain their identities as members of a racial minority as well as those related to home or work. Their social interactions and physical experiences in the water and on the beach developed community relations in the group that deepened over time, allowing therapeutic responses to difficulties in ageing, illness or other adversities. A professional cycle racing event in Australia enabled the cycling tourists attending to actively interact with the location and landscape, the event's programming and other tourists, within a temporary space for escape, which afforded them positive wellbeing experiences. ^[33] Participants were able to affirm and celebrate their identities as cycling enthusiasts (participants and spectators). They reported the event as allowing them to be free from everyday stresses and unconstrained by roles adopted in other areas of their lives. In another study, immersion in an unfamiliar wilderness environment for young people taking part in a 4-week wilderness camp was described as distracting from activities that the authors considered might impact negatively on wellbeing, such as excessive internet use. ^[49] Notably, two studies also illustrated that whilst sporting spaces recreate an environment of escape and relaxation for some, they also have the potential to alienate those who were outside the group. ^[29, 33] Similarly, in relation to green and blue spaces in urban areas, it was observed that individuals perceiving themselves to be unlike others who use the spaces, might not feel them to be restorative. ^[41]

Places and spaces for respite and recovery through participatory arts, sport and physical activity

In the evidence in this review, places and spaces were described as having a role to play in providing opportunities for respite or recovery, including from distressing experience or trauma. ^[5, 7, 11, 21, 22, 23, 42, 58, 59] For a group of combat veterans, the nature-based activity of surfing offered distraction from the symptoms of post-traumatic stress disorder (PTSD). ^[5] Even though respite was only temporary, sporting activity in the natural environment was shared as were stories between group members, which facilitated positive relationships and contributed to feelings of enhanced subjective wellbeing. It was noted, however, that to experience a sustained effect, participants might need to engage more regularly between surfing sessions, in other similarly physical or mindful activities. The informal, non-clinical space of a public art gallery in which people living with psychosis took part in an art intervention helped participants to focus attention away from their symptoms, gaining feelings of respite and brief recovery. ^[7]

Two studies were set in places that had suffered conflict or disaster. ^[11, 42] Engaging with Dance Movement Therapy (DMT) workshops in the post-conflict zone of Timor-Leste, participants felt secure enough to explore and share their emotional responses to physical movement, enabling connection with their difficult personal

stories and those of others and affording them healing experiences through dance. [11] Healing and rebuilding the disrupted physical spaces and familiar rhythms of life through sporting participation was also explored in the study of the New Zealand earthquake. [42] Through sport, participants were able to find new and creative patterns of involvement in the changed landscape and areas they had not frequented in the past, so they could reimagine disrupted spaces in a post-disaster moment.

There may also be wellbeing gains for individuals taking part in cultural activities in areas attempting regeneration (to improve the physical space of a location). For example, those participating in cultural arts experiences in three UK coastal towns under regeneration reported that participating led to a holistic sense of health and wellbeing because the activities were mentally stimulating, challenging and spiritually uplifting. [59]

Informal and non-clinical settings provided spaces in which mutual support could enable recovery and healing. [22, 23, 58] A community singing group for those with chronic lung disease enabled participants to develop a sense of ownership of the activities and the space, which became a relaxing and enjoyable social environment to engage in meaningful, shared activity. [23] Older people at risk of loneliness or poor emotional or mental wellbeing who took part in museum-based social prescribing programmes incorporating arts and creative activities experienced the museum setting as a space that they could take ownership of, which provided new experiences and enabled learning, discovery and imagination to flourish. [58] The older participants described themselves as becoming happier and more confident as the programmes progressed. For individuals living with mental illness, a football project was viewed as key in supporting recovery, enabling peer support, encouraging participants' engagement with clinical professionals and playing a role in countering stigma. [22]

Participatory arts, sport and physical activity and sensory places and spaces

The evidence shows that taking part in participatory arts, sport and physical activity creates spaces in which participants deepen attention to bodily feelings and rhythms producing a range of positive wellbeing experiences. There was an acknowledgement that the kinds of experiences described in these studies incorporated complex sensations which were both pleasurable and positive and discomforting or negative.

Combat veterans taking part in surfing experienced the environment through a range of bodily senses, including taste and smell. [5] One participant described the experience as involving both physical exhaustion and exhilaration, with the force of the waves on his body feeling as if they were pummelling out the symptoms of

PTSD. Walkers and cyclists felt a shared sense of exhilaration on completion of a difficult route, and pride in recognising growing physical fitness or strength, leading to a sense of feeling well and of solidarity and community between those who had overcome physical challenges together. ^[32, 33, 37] Cyclists living with mental ill-health described an awareness of their body's reaction to external stimuli when taking part in physical activity outside such as the wind and fresh air, and they related this to feelings of healing and improved physical, mental and social wellbeing. ^[32] People using natural spaces in urban settings described heightened sensations as a result of the natural setting, with the sensory experience helping to create space for contemplative thought. ^[27] Amateur cyclists riding the same demanding routes as professional racers reported sensations of physical discomfort and exhaustion, which for them contributed to a sense of an authentic cycling experience, and one which had great currency when shared with others also taking part or retold as a narrative to others at different times. ^[33] Action sports enthusiasts pursuing activity in the landscape of a post-earthquake zone were well aware of potential risks; for some, this resulted in anxieties, and a desire to maintain closer connections with others while others described increased feelings of excitement with such risk. ^[42] It was noted in another study that perception of both excessive or insufficient levels of risk or challenge in an outdoors environment might present a barrier to engagement for some. ^[27]

Encounters with material elements and prompts in both natural and built environments also provoked personal reminiscence and nostalgia and imaginative engagement with the historical and cultural elements of place. While these sometimes led to reflective introspection, they also led to the sharing of experience with others, either during or after the activity. For example, the act of walking either as a group or individually along a trail or a familiar street was seen as offering natural opportunities for connections and relationship building. ^[37, 44] For those walking alone in both urban and natural environments, observation of others engaged in social activity could be felt as a shared experience, supportive of individual psychological wellbeing. ^[4, 27] In a study following people with dementia and their care partners taking part in creative and educational activities in a historic building, the sensory elements of the activities (the sights, sounds and smells) were found to help build associative connections for participants both to the place and to other people. These reinforced existing relationships and contributed to the development of new social contacts and positive mood. ^[53] Encounters and associations of this kind were most often connected in the included studies with enhanced individual wellbeing and feelings of belonging although one study noted the potential negative effects of activity that encouraged thoughts of the past. ^[25]

Theme 4: Safe spaces

Eight of the fifty-nine included studies explored the idea of safe spaces for participatory arts, sport or physical activity.^[7,8,9,14,30,32, 39 51] The evidence refers to the ways that spaces (activities, equipment and people) are organised and supported to take part and feel confident that they will not be exposed to physical or emotional harm in doing so. Safe spaces are constructed to create open and equal interactions and mutual and supportive relationships between peers or service users and professionals, which are free from bias, criticism, prejudice, discrimination, harassment or threatening actions. There is some evidence that safe spaces allow people to feel comfortable to discuss or reflect sensitive issues in a stigma-free environment.

Spaces for mutual and supportive relationships through participatory arts, sport and physical activity

Four of the studies explored the way in which sports or participatory arts activities create a safe space in which participants were able to engage in mutually supportive interactions with peers and others.^[7,8,9,32] These interactions might be with programme facilitators or professionals and are reported as being free from criticism or harassment. For people living with psychosis, an art gallery-based intervention involving art-viewing and art-making in a group provided a safe space (a haven) in which to feel confident to engage in activity in an unthreatening space that could promote recovery and wellbeing.^[7] Staff and support workers took part alongside participants, and this was thought to help facilitate staff-client relationships characterised by feelings of validation, commonality, friendship and genuineness. The development of quality relationships connected to the art, art-making and gallery space was viewed as a factor in feelings of achievement, rather than feelings of failure, more commonly associated with the participants lived experience. A study exploring participation in an outdoor cycling programme of people living with mental illness found the active and committed participation of staff and volunteers to be crucial in the development of a space characterised by supportive, mutually respectful and bias-free relationships.^[32] This collaborative activity taking place outside a hospital setting created an egalitarian safe space in which staff and participants would work towards a common goal within a space that did not emphasise the limits of mental illness and afforded opportunities for wellbeing gains.

Peer support was also an important process involved in the delivery of a participatory music programme for young people aged 13-21 in custodial and community supervision in England and Wales.^[9] The programme offered a safe space in a

custodial environment for ensuring a positive experience of the activity and gaining positive reinforcement from adults and peers as well as a sense of autonomy in an environment, more usually associated with authoritarian control. It was noted in this study that the effects of the programme were limited by the restrictive environment of the youth justice settings, but where the programme was successful, music helped to mitigate some of the negative aspects of the incarceration. A community football programme for people diagnosed with intellectual impairment detained in secure settings also created a safe space in which participants could experience validation and support from both peers and coaches. ^[14] The authors of this study noted the importance of giving and receiving peer support and the creation of a space in which participants felt welcome and valued. Participants linked their participation to enhanced physical and emotional wellbeing and progress towards recovery. Overcoming the physical challenges of cycling in an egalitarian and supportive environment in which participants could both observe and become role models to others with similar difficulties was thought to improve the self-efficacy of people living with mental illness. ^[32]

Two studies examined the capacity for community singing groups to provide environments that were non-judgemental, and in which participants felt safe, relaxed and able to connect more easily with others. For refugees adjusting to life in Norway, a multicultural amateur choir provided an equitable and collective occupation in which members could share skills and develop new ones. ^[30] Neither language nor musical skill were barriers to participation, since the repertoire included songs from many countries, and only a basic interest in singing was needed. The choir was, therefore, an arena in which participants could feel safe to be themselves and connect more easily with others. A participatory singing activity gave a group of Aboriginal and Torres Strait Islander people opportunities to support and work with each other towards a common goal in a space where they felt themselves to be trusted and respected. ^[39]

Survivors of the 1994 Rwandan Genocide, mainly war orphans and other vulnerable young people, took part in a music programme at a centre run by a non-governmental organisation providing education, mentoring, counselling and support. ^[8] Rather than a stand-alone clinical intervention, music-making and listening was offered as part of a therapeutic and nurturing environment created within the centre. Participants described the activity as creating a safe place, grounding them in the present, away from past pain. It also helped them to experience a sense of fellowship with fellow survivors.

The inclusive and egalitarian nature of involvement encouraged through a programme of cultural and other activities involving all those who used a square in

Hackney London, including those who were homeless, drug users and street drinkers, was reported to have been a factor in its success. ^[51]

Challenging stigma through safe spaces for participatory arts, sport and physical activity

Five studies exploring safe spaces, wellbeing or loneliness and participatory arts, sport or physical activity identified the potential of places and spaces to challenge social stigma: the discrimination or disapproval of someone based on attributes or characteristics that are different from others. Two studies highlight the creation of non-stigmatising spaces for those living with mental health conditions. ^[7, 32] An art gallery space is described as providing an environment away from the stigma associated with mental health services, usually in clinical settings for people with experience of psychosis. ^[7] Art-viewing and art-making were reported to support the creation of an alternative meaning and identity for the participants living with psychosis who could express themselves and feel wellbeing benefits as artmakers and gallery audiences, rather than being defined by a stigmatised label as someone with a mental health condition. Reflecting the idea that stigma is commonly linked to an absence of meaningful relationships, it was reported that the positive relationships formed with professionals also served to challenge the stigma associated with a diagnosis of psychosis. Cycling outdoors was explained in another study with those living with mental illness as a potential activity space for developing non-stigmatising therapeutic relationships between participants. ^[32] It was said to create a space perceived by participants to be socially inclusive, non-stigmatising and effective in aiding recovery.

Stigma experienced by those living with physical impairment was reported in one study to be connected to feelings of rejection by peers, the community and wider society. However, a football training programme created a place and space in which could they feel free from the stigmatising effect of discrimination and be able to communicate and participate with some degree of autonomy. ^[14]

A music programme for people in youth justice settings was reported in one study as a space affording people respite from stigma through engagement in a meaningful and creative activity. ^[9] Such positive wellbeing experiences were, however, fragile because prisons are places where such activities are transient, may be unfamiliar causing feelings of incompetence, and which are dominated by regimes of control. These can serve to limit the creative and non-stigmatising experience.

In one study of survivors of genocide in Rwanda, orphans were reported as experiencing social exclusion and stigma in their own communities. Addressing stigma was central to programmes of activities offered through voluntary support

organisations to ensure learning about and support for those experiencing stigma and those believing stigmatising views. ^[8]

Theme 5: Temporal aspects of place and space (place-temporality)

Five of the fifty-nine included studies examine the patterns, timings and rhythms of movements associated with participatory arts and/or sport or physical activity that are significant to people's wellbeing. ^[8, 11, 25, 42, 44] This theme includes the importance of the pace and tempo of activities, their timing and the sense of time created in a space or place as well as to issues of history, heritage, storytelling, memories and nostalgia.

Two studies illustrated the ways participatory arts (singing and dance) afforded transformational possibilities for wellbeing allowing participants who had experienced difficulties in life to feel located in the present, to cope with the past and have hope for the future. ^[8, 11] Taking part was associated with being able to make sense of things that had happened over time through storytelling in music or dance that allowed a healing process to occur. In one study of a walking and talking programme for those living with mental health conditions, the informal pattern of place and space afforded opportunities for the remaking of temporal and spatial arrangements of their care, taking them away from the routine of the clinical space. ^[25] Walking was reported in a single ethnographic case study as creating spatial and temporal copresence between people which in turn creates a shared physical rhythm with others and a communal wellbeing experience. ^[44] Walking allows spaces of connection to be experienced through this collective pattern and rhythm of physical activity. Similarly, adventure sport was reported to re-create familiar rhythms and routines that help people reimagine a place beyond the disruption of disaster (earthquake). ^[42]

Evidence of addressing wellbeing or loneliness inequalities through studies on space, place and participatory arts, sport or physical activity

The studies in this review variously reported on or specifically emphasised the demographic characteristics of participants including describing socioeconomic status, ethnicity, gender, age and cognitive or physical illness or disability. These studies identify some aspects of the specificity of wellbeing or loneliness in places and spaces for participatory arts, sport or physical activity that is associated with

inequality. There is evidence in this review based on a more detailed analysis of the relationship between place and space, wellbeing enhancement or alleviating loneliness that demonstrates place and space can both reinforce and challenge inequality (broadly through processes of inclusivity and exclusivity) in relation to ethnicity, refugee status, socioeconomic position and the stigma associated with physical and mental impairment.

Completeness of the included evidence

The inclusive and open review question, precise search terms and focus on conceptual and theoretical approaches to place and space returned a relatively high number of relevant studies for inclusion. We excluded studies not in English meaning that some relevant studies may have been excluded. However, the systematic search strategy ensures that this overview represents a comprehensive summary of all existing eligible studies published prior to the search dates.

Summary statement on the quality of the included evidence

Overall the quality of included studies was mixed, but more studies were rated as higher quality (6+/8) than of lower quality. There is a relatively large body of qualitative literature which examines place and space and diverse aspects of wellbeing when taking part in participatory arts, sport or physical activity. The literature describes experiences of place and space for diverse population groups in different settings and contexts. We have high confidence that the evidence in this review contributes to understanding the wellbeing benefits of taking part in participatory arts, sport or physical activity when people feel a sense of belonging or community. Enabling people to feel like they belong and are part of a community also has the potential to alleviate social and emotional loneliness and types of loneliness described as a feeling of complete detachment from the world (existential loneliness). We also have high confidence that creating therapeutic and sensory spaces for taking part in participatory arts and sports/physical activity can contribute to wellbeing. The review reports a judgement of moderate confidence in ensuring that there are safe spaces for taking part in arts, sport and physical activity, which can lead to wellbeing benefits including the alleviation of loneliness. A judgement of moderate confidence is also made about evidence for wellbeing enhancement in relation to patterns, timings and rhythms of movements and activities in places, and the ways that time and timing are significant to peoples' experiences (place-temporality).

The rating of moderate confidence is due to moderate concerns with methodological limitations, coherence and adequacy. Most published studies obtained appropriate ethics approval although this was not always reported extensively. The methodological weaknesses of these qualitative studies included a lack of exact details of the researcher's role, potential bias and influence on sample recruitment, settings and the responses of the participants. The grey literature was of mixed quality with high quality reports including details of methods, theoretical analysis and a recognition of limitations, and low quality (credibility) reports providing little detail of methods and commonly taking participant accounts at face value without theoretical analysis.

Strengths and limitations of the review process

The focus on the concepts of place and space and the interconnections with wellbeing and loneliness present challenges in searching for and finding evidence, meaning that it is possible that some relevant evidence is not included. However, we undertook a comprehensive search strategy to identify all existing eligible studies published for the search dates. We also made provision for supplementary searches to identify studies that could have been missed in database searching alone.

The rigorous and systematic search strategy and comprehensive nature of this review is a strength. The pre-publication of our protocol on PROSPERO ensures methodological transparency and mitigates against potential post-hoc decision making, which can introduce bias to the process. Dual screening of the searches and data extraction and an independent quality assessment of the included reviews ensured a rigorous process.

There is a potential risk of publication lag wherein possible important new evidence that has not yet been included in published articles and reports is not identified and included.

The use of the CERQual criteria introduces an element of a subjective judgement. A consistent approach to judgements across the different interventions has been applied, but it should be recognised that these judgements are open to interpretation.

Implications for research, policy and practice

1. The evidence in this review shows that emotional, social, cultural and political meanings that take place through participatory arts, sport and physical

activities can enhance positive feelings (belonging, community, contentment and escape), but certain conditions and circumstances can also generate negative feelings of exclusion, fear and anxiety. This makes space, place and placemaking, however complex its dimensions, important for understanding and promoting wellbeing in culture and sport policy and practice.

2. There is a relatively large body of fairly high-quality qualitative research conceptualising place/space and its influence upon positive feelings of belonging and community. This can be used to support public policy and practice initiatives to ensure local opportunities for people to meet and engage with people who may be like them or different from them, in ways that achieve integration and social cohesion. Codesigning public spaces to recognise local need, and creating environments for shared experiences, inclusive practices of moments of solitude can maximise the wellbeing potential of places and places for participatory arts and sports.
3. Sensory and therapeutic spaces for participatory arts, sport and physical activity have the potential for enhancing wellbeing and connecting with nature. Such connections can allow people to tap into the emotional aspects of wellbeing, including solitude and alleviation of loneliness. Activities in places that allow people to invite people to draw on a sense of sight, sound, smell, taste or touch and create positive emotional experiences in doing so can have positive wellbeing benefits.
4. Place and space can be perceived and conceived in different ways. Creating policies for wellbeing in participatory arts, sport and physical activity requires the adoption of and support for multidisciplinary, cross-sector and coproduction approaches to design place-making to support wellbeing in effective and sustainable ways.
5. Attention should be paid to countering place inequality in promoting wellbeing and placemaking. It should be ensured that access to and involvement in places and spaces for participatory arts, sport and physical activity avoid forms of exclusion generated by design, practice and promotion, taking account of three interconnected recommendations:
 - i. In reshaping a space or place, consideration should be made for amplifying the sense of inclusivity characterising it, so that it can be reconstituted as a place associated with alternative, more positive meanings
 - ii. The creation of *safe spaces* for facilitating open, honest, transparent and authentic experiences, particularly for those facing ill physical and mental health or trauma, is an imperative for effective and sustained interventions
 - iii. Consideration should be made for addressing the stigmatising elements of place and space to resolve discriminatory practices and

create environments that engender meaningful connection, value, celebrate diversity and offer support for those experiencing and/or creating stigma.

6. In evaluating the findings in this review, we have moderate confidence in the evidence for safe spaces and temporal aspects of place. This largely relates to the limited extent of the literature and to methodological issues in the conduct of the reported research. There is, therefore, considerable potential to generate a more robust evidence base for policy and practice in relation to these factors and their interconnections with belonging, community and therapeutic/sensory characteristics, especially for participatory arts, sport and physical activity intervention development and evaluation.

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Appendix 1: Excluded studies table

Studies excluded as not phenomenon of interest but relevant to intangible assets or volunteering will be listed and reported separately in forthcoming reports (December 2019)

Authors (Year)	Title	Reason for Exclusion
Published articles		
¹ . Adebayo et al. (2019)	Here, we are all equal!: soccer viewing centres and the transformation of age social relations among fans in South-Western Nigeria	Phenomenon of interest
² . Agger et al. (2012)	Testimony ceremonies in Asia: Integrating spirituality in testimonial therapy for torture survivors in India, Sri Lanka, Cambodia, and the Philippines	Phenomenon of interest
³ . Aho (2014)	The healing is in the pain: Revisiting and re-narrating trauma histories as a starting point for healing	Phenomenon of interest
⁴ . Allen & Wozniak (2014)	The integration of healing rituals in group treatment for women survivors of domestic violence	Phenomenon of interest
⁵ . Askins & Pain (2011)	Contact zones: Participation, materiality, and the messiness of interaction	Population
⁶ . Boyd & Goodwin (2019)	"It's hard when people try and get their kids away from Cole": A family's experiences of (in)dignity in leisure settings	Phenomenon of interest
⁷ . Burnett & Lucas (2010)	Talking, walking, riding and driving: The mobilities of older adults	Study design
⁸ . Casey et al. (2011)	Characteristics of physically active and inactive men from low socioeconomic communities and housing estates: a qualitative study using the socioecological model	Phenomenon of interest
⁹ . Bosco et al. (2018)	Fighting stigma in the community: Bridging ties through social innovation interventions	Unavailable
¹⁰ . Cali (2017)	Creating ties of intimacy through music: The case study of a family as a community music experience	Phenomenon of interest
¹¹ . Caperchione et al. (2011)	Physical activity behaviours of culturally and linguistically diverse (CALD) women living in Australia: A qualitative study of socio-cultural influences	Phenomenon of interest
¹² . Chin (2016)	We've got team spirit!: ethnic community building and Japanese American youth basketball league	Population
¹³ . Kluge (2014)	Music, Movement, and Mood: Health Promotion Classes Boost Well-Being and Create Social Bonds	Quality assessment (grey)
¹⁴ . Lee & Jin (2013)	Older Korean cancer survivors' depression and coping: Directions towards culturally competent interventions	Phenomenon of interest
¹⁵ . Mauro (2015)	Transcultural football. Trajectories of belonging among immigrant youth	Population
¹⁶ . Melhuish et al. (2017)	Developing relationships between care staff and people with dementia through Music Therapy and Dance Movement Therapy: A preliminary phenomenological study	Population
¹⁷ . Nathan et al. (2010)	Social cohesion through football: A quasi-experimental mixed methods design to evaluate a complex health promotion program	Study design
¹⁸ . Neville et al. (2018)	'Engaging in my rural community': Perceptions of people aged 85 years and over	Phenomenon of interest
¹⁹ . O'Grady (2015)	Dancing outdoors: DiY ethics and democratised practices of wellbeing on the UK alternative festival circuit	Quality assessment
²⁰ . Pearson (2016)	Unsteady Belongings: Rethinking the Experience of Nation through Movement	Phenomenon of interest
²¹ . Reynolds (2010)	'Colour and communion': Exploring the influences of visual art-making as a leisure activity on older women's subjective well-being	Phenomenon of interest
²² . Roberson & Pelclova (2014)	Social Dancing and Older Adults: Playground for Physical Activity	Phenomenon of interest
²³ . Rynne (2016)	Exploring the pedagogical possibilities of Indigenous sport-for-development programmes using a socio-personal approach	Phenomenon of interest

²⁴ . Thøgersen-Ntoumani et al. (2017)	Perceptions of group-based walks and strategies to inform the development of an intervention in retirement villages: Perspectives of residents and village managers	Phenomenon of interest
²⁵ . Van der Hoeven & Brandellero (2015)	Places of popular music heritage: The local framing of a global cultural form in Dutch museums and archives	Phenomenon of interest
²⁶ . Wiltshire & Stevenson (2018)	Exploring the role of social capital in community-based physical activity: qualitative insights from <i>parkrun</i>	Phenomenon of interest
Grey literature		
²⁷ . Baker (2017)	Ageing in public: Creative practice in ageing and the public realm from across the UK	Study design
²⁸ . Buck (2016)	Gardens and health: implications for policy and practice	Study design
²⁹ . Hera (2019)	Hera Project: Year End Summary	Phenomenon of interest
³⁰ . Lynch (2016)	"Not so cut off": case study evidence to illustrate the impact of the arts and older people	Phenomenon of interest
³¹ . MacLeod et al. (2018)	Isolation and loneliness – opening up new stories and interpretive experiences at Calke Abbey	Phenomenon of interest
³² . Magnani	Making indigenous futures: land, memory, and 'silent knowledge' in a Skolt Sámi community	Phenomenon of interest
³³ . UK Research Institute	Park Lives Year 3 Evaluation	Study design
³⁴ . Theatre Royal Plymouth (2019)	Our space: Voices and reflections	Phenomenon of interest
³⁵ . United Welsh	A summary report on the importance of sheltered schemes as places which can enhance resident wellbeing and reduce loneliness	Study design
³⁶ . Willis Newson (2018)	Why and how does the Human Henge support participants' wellbeing?	Phenomenon of interest

Appendix 2 Data extraction form including CASP quality check (published literature)

Data Extraction Form Place/space- Reviewer Initials:

Author, Year, Title	
Location	
Study objectives	
Study design (e.g. qualitative or mixed methods with qualitative element)	
Description of the study identify the type of sport/physical activity or performing art (nb: dance identified as a performing art for this project)	
Participants included Describe details of the participants including a focus on protected characteristics (age, gender, race, sexuality, etc.), socio-economic status, sample type (e.g. community, individuals, groups), and location of the study.	
Details of analysis and evaluation (Include type of and methods of analysis e.g. interviews and thematic analysis).	
For qualitative themes, describe how loneliness is alleviated and/or wellbeing is enhanced through the role of place/space. What results are reported, and what evidence is provided to the alleviation of loneliness and/or enhancement of wellbeing (include details of any theoretical approach to place/space and loneliness/wellbeing)	
Study conclusions (relevant to this conceptual review).	

Limitations identified (list any limitations described by the authors).			
Conflicts of interest and sources of funding			
Ethical procedures reported			
Quality of individual papers (based on CASP Checklist)			
	Y	N	CAN'T TELL
Was there a clear statement of the aims of the research?			
Is a qualitative methodology appropriate?			
If answer to both questions above is Y, then proceed with the questions below			
Was the research design appropriate to address the aims of the research?			
Was the recruitment strategy appropriate to the aims of the research?			
Was the data collected in a way that addressed the research issue?			
Has the relationship between researcher and participants been adequately considered?			
Have ethical issues been taken into consideration?			
Was the data analysis sufficiently rigorous?			
Is there a clear statement of findings?			
How valuable is the research? (brief comments)			

