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Mental health and wellbeing in the Scottish islands: A review of the literature

Dr Janet Heaton
April 2022



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The review was undertaken by Janet Heaton in the Division of Rural Health and Wellbeing, Institute of Health, Social Care and Innovation, at the University of the Highlands and Islands (UHI), in conjunction with the Scottish Rural Health Partnership (SRHP), from January to April 2022. The searches of academic databases, and location of more difficult to retrieve items, were done with support from Chris O'Malley, Highland Health Sciences Library, Centre for Health Science, Inverness.

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The views expressed in this report are those of the independent researcher and do not necessarily reflect those of the Scottish Government.

Executive Summary

The main aim of this literature review was to describe the state of the art of research on mental health and wellbeing in the Scottish islands.

A mapping review was conducted to profile research activity in relation to six island groupings:

1. Shetland Islands
2. Orkney Islands
3. Western Isles (Outer Hebrides)
4. Isle of Skye and The Small Isles
5. Islands off the Argyll coast (including Isle of Mull, Jura, Islay, Bute)
6. Islands off the North Ayrshire coast (including Isle of Arran, Great Cumbrae).

Research works were identified through searches of academic databases and organisations' websites, conducted in January and February 2022.

A total of 80 works, linked to 53 studies published between 1977 and 2022, were identified with relevant content on the topics of mental health and wellbeing that was attributable to one or more of the Scottish islands. The works were comprised of 38 journal articles, 34 reports, two book chapters, and six PhD theses. Most were empirical in nature, with a few commentaries, conceptual and methodological pieces.

Relevant works were found for each of the island groupings, although the coverage was variable in terms of both the number of works (and associated studies) and nature and extent of the focus on mental health and wellbeing, and/or the island context. The Western Isles were represented in the largest proportion of the works and associated studies identified. Surprisingly, relatively few studies included the Orkney Islands.

Only a portion of the overall works were explicitly interested in the connections between island life and mental health and wellbeing. Those that explored these connections generally showed that there were variations between and within different island communities, and between islands and other places. The topics most commonly examined were: telehealth interventions, social prescribing initiatives, and participation in cultural and community-led projects.

While the heterogeneous nature of the works did not lend themselves to a narrative review or synthesis of the evidence, some common themes were identified in the process of classifying and summarising the literature. These included issues with and concerns about access to specialist mental health services and support, stigma, confidentiality, alcohol consumption, suicide rates, and digital inequalities and engagement. They also included insights about the importance of belonging and feeling connected to communities, the 'double-edged sword' of living in small communities, and the experience of minority stress or similar if not considered to be an accepted or equal member of a community. They also revealed strong interest in and support for different forms of connections that sustain mental wellbeing, and community-led and place-based approaches to mental health and wellbeing.

Based on the findings, ten priorities for future research are suggested:

1. The survey of adult residents in all Scottish islands (Wilson et al., 2021) is repeated periodically to provide longitudinal data for analysis over time, enabling examination of the impact of the Covid-19 pandemic on mental health and wellbeing, and also expanded to include children and young people.
2. In-depth qualitative research with island residents and service providers, examining their experiences of and responses to mental health issues within and across different island communities, to identify the characteristics that are considered to make some communities supportive and resilient, and others less so.
3. The use of sampling frameworks that include island populations in wider studies of people with mental health conditions where possible, with data being analysed and reported by geographical sub-populations (providing this does not risk identifying individuals).
4. Research investigating the factors involved in deaths by suicide in the Scottish islands, and measures to prevent them in this context.
5. Research on the mental health and wellbeing of care staff.
6. Research on models of service delivery for relatively small numbers of island residents with specialist needs, including access to specialist staff (e.g. eating disorders, self-harm) and places of safety.
7. Research investigating which configurations of in-person and remote mental health consultations works best, for whom, in what circumstances, for island residents - and how this can be facilitated in flexible and responsive services models of care. This research needs to consider the needs and preferences of various groups, including children and young people; older people; men; and minority groups (e.g. LGBT, migrants).
8. Research examining the social and place-based determinants of mental health and wellbeing in island populations.
9. Research that builds on existing international research investigating the benefits of the natural environment and cultural activities for mental health and wellbeing, for example, by examining the effects of participating in associated activities in the Scottish islands for residents and for visitors.
10. Research investigating in more detail the nature of 'connected' communities, to establish empirically the ways in which they are created (and eroded) over time and how they relate to the experience of community mental health and wellbeing, as well as to apply existing or develop new theories explaining the observed variations, associations, and contradictions. A place-based approach would enhance understanding of the inter-play of different contributory factors in island communities, considering the uniqueness of given island populations, their relations with neighbouring islands and/or mainland communities, and arrangements with associated health and social care systems.

1. Introduction

1.1 Aims

The main aim of this literature review was to identify and summarize the state of the art of research that has been published on mental health and wellbeing in the Scottish islands.

A mapping review design was chosen in order to profile the published research by the different island groupings and to provide some general observations about the state of research on the topic, including notable trends, foci, findings, and gaps. Given the anticipated heterogeneity of the body of research, it did not seek to produce a synthesis of the evidence (as in narrative reviews and systematic reviews).

It is hoped that the review will help to inform policy making on mental health and wellbeing in the Scottish islands and related topics. It is also hoped it will help to shape decisions around priorities for future research and provide an up-to-date knowledge base for researchers to draw on and develop.

This report describes the conduct and findings of the resulting mapping review of the academic and grey literature that was undertaken between January and April 2022.

1.2 Definition of an island and island groupings

For the purposes of the review, the definition of an island used by the National Records of Scotland for the Scottish Census was adopted:

'An island is a mass of land surrounded by water, separate from the Scottish mainland... Islands are still classified as individual islands even when they are linked to other island(s) or to the mainland by connections such as a bridge, causeway or ford' (National Records of Scotland, 2015: 30, note 9).

According to the Scottish Census of 2011, there are 93 inhabited islands in Scotland, including ones joined to the mainland by causeways or bridges (National Records of Scotland, 2015: 3). In the Census, these are divided into 56 island groupings for analytical purposes.

In this report, research activity has been examined in relation to six island groupings:

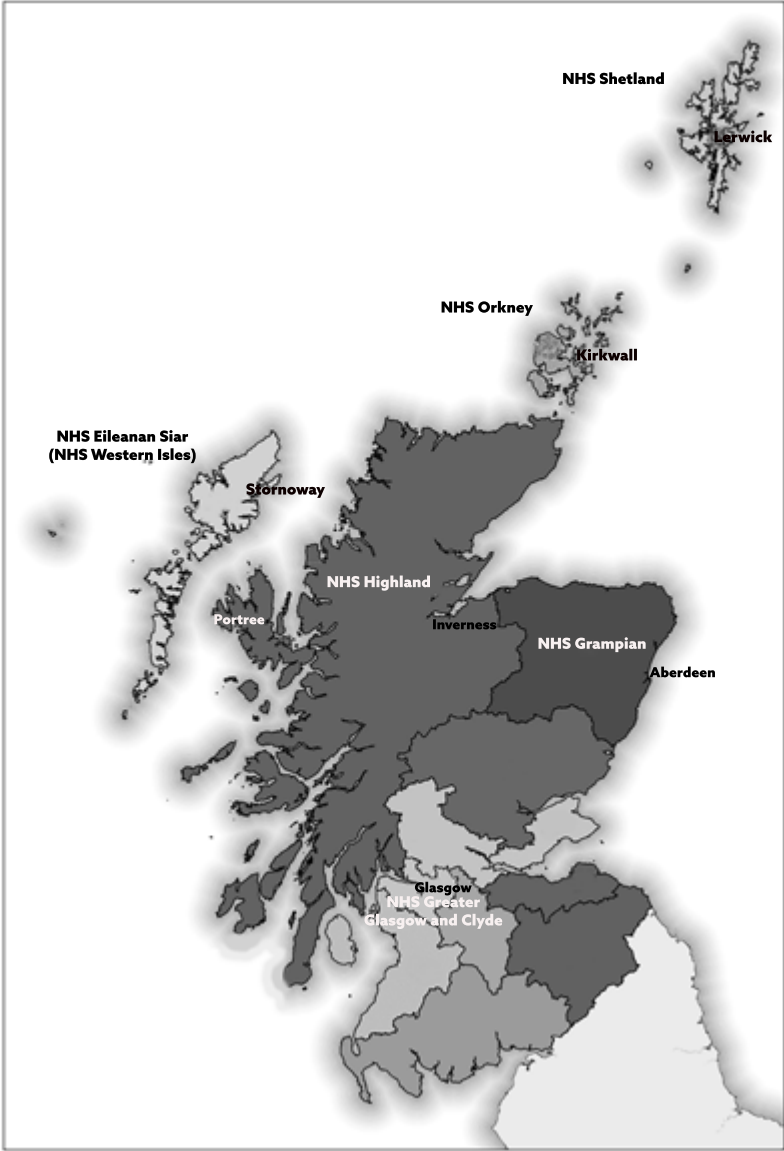
1. Shetland Islands
2. Orkney Islands
3. Western Isles (Outer Hebrides)
4. Isle of Skye and The Small Isles
5. Islands off the Argyll coast (including Isle of Mull, Jura, Islay, Bute)
6. Islands off the North Ayrshire coast (including Isle of Arran, Great Cumbrae).

These island groupings were chosen to reflect both geography and alignment with NHS Health Boards and Local Authority council areas. Three of the groupings – Shetland Islands, Orkney Islands and Western Isles – have island Health Boards and councils; the other three groupings are covered by Health Boards and councils that cover both island and mainland regions.

As shown in Figure 1, some island groupings have relationships with non-local Health Boards, including for specialist mental health services. For example, some psychiatric services for residents of the Shetland Islands and Orkney Islands are provided by specialists based in Aberdeen by NHS Grampian (see also section 2.4).

Whilst the six groupings reflect these administrative relationships, they do not necessarily reflect the unique identity and culture of individual islands, including their alignments with other islands and the mainland.

Figure 1: Map of island NHS Health Boards and associated mainland providers of specialist mental health services



1.3 Organisation of report and nomenclature

The report is in six parts. Following this introduction, Part 2 provides a brief outline of the policy context of the review. Part 3 describes the methods used to identify and map the literature, and includes a note of the challenges and limitations of the review. Part 4 profiles the literature by the different island groupings. Part 5 provides some general observations about the overall state of research on the mental health and wellbeing in the Scottish islands. Part 6 contains recommendations for future research. The appendix contains further information on aspects of the methods used in the review and a list of the works included.

Throughout the report, the term 'works' is used to refer to publications such as journal articles, reports and dissertations; the term 'study' is used to refer to a research project that gave rise to one or more associated works.

2. Context

2.1 Population of the Scottish islands

According to the Scottish Census of 2011, the 93 inhabited Scottish islands had a total population of 103,700, which is 2% of the population of Scotland (National Records of Scotland, 2015). The most populous islands were Lewis and Harris in the Outer Hebrides archipelago (21,031), followed by the mainland of Shetland (18,800), mainland of Orkney (17,200), and Isle of Skye (10,000) (National Records of Scotland, 2015: 8). The population of the islands increased by 4% between 2001 and 2011 (reversing a decline in the previous decade), although the growth was mainly in the relatively populous islands and there was a decline in islands with relatively small populations, with some exceptions (National Records of Scotland, 2015: 8).

Based on current trends, the sparsely populated areas of Scotland, including the Scottish islands, are projected to decline by over 18% between 2018 and 2043 (Hopkins and Piras, 2020: 16). For example, Shetland Islands are projected to lose 10% of their total population, and just over 15% of their working age population, over this time frame. Orkney Islands are projected to lose between 13% and 17% of their overall population, and more than 20% of their working age population. The Western Isles are expected to lose between 21% and 24% of their total population, and between 27% and 33% of their working age population. Isle of Arran, off the North Ayrshire coast, is expected to lose 32% of its total population, and around 35% of its working age population, by 2043. (Hopkins and Piras, 2020: pp. 8-9)

In the Scottish Census of 2011, the median age of island residents was 45 years (41 years across Scotland) and 21% of island residents were aged 65 years or over (17% across Scotland). Men comprised a slightly higher proportion of the population of the islands at 49.4% compared to 48.5% across Scotland. There was a bigger difference in households, with the proportion of owner-occupiers who owned their properties outright being 43% on the islands compared to 28% nationally (National Records of Scotland, 2015: 4). Also, 10% of household spaces on the islands were classed as second homes or holiday accommodation, compared to 1% nationally; on some islands this figure was much higher, at 34% (Tiree), 40% (Great Cumbrae), 42% (Colonsay), and 43% (Raasay) (National Records of Scotland, 2015: 5).

In 2011, the top three occupations of island residents were care workers and home carers, sales and retail assistants, and farmers (National Records of Scotland, 2015: 5). Informal care (at least one hour per week) was provided by 9.5% of the island population (9% across Scotland) (National Records of Scotland, 2015: 5).

The proportion of island residents who could understand, speak, read and write in Gaelic was 11% in 2011 (National Records of Scotland, 2015: 5). In the Western Isles council area, over half the population aged 3 and over were Gaelic speakers; on the Isle of Skye it was 30% (National Records of Scotland, 2015: 6).

2.2 Mental health and wellbeing in the Scottish islands

In the Scottish Census of 2011, 83% of island residents reported their general health as being 'very good' or 'good', compared to 82% across Scotland (National Records of Scotland, 2015: 5).

The number of island residents reporting a long-term mental health condition was 3252, around 3% of the Scottish islands' population (Source: Scotland's Census 2011, National Records of Scotland, online Table Q5304SC - Long-term conditions).

The Scottish Health Survey 2016-19 dashboard includes more recent data on mental wellbeing scores by council areas, using the Warwick-Edinburgh Mental Wellbeing Scale (WEMWBS). In 2019, two of the three island groupings with their own councils scored significantly higher on the scale, at 51.5 (Western Isles) and 51.1 (Shetland Islands), compared to 49.7 across Scotland; a higher score of 50.6 was also found for the Orkney Islands (Scottish Health Survey 2016-19 dashboard (<https://www.gov.scot/collections/scottish-health-survey/>)

The Scottish Health Survey also includes data on how strongly adults in Scotland feel they belong to their immediate neighbourhood. On this indicator, the same three island groupings scored relatively highly in 2019 compared to across Scotland (78%). For example, in Orkney, 88% respondents agreed 'fairly strongly or 'very strongly' with a statement on the topic; in Shetland, it was 90%; and in the Western Isles it was 94%.

2.3 Suicide rates in the Scottish islands

Between 2000-2004 and 2016-2020, there was an overall increase in suicide mortality rates in four Local Authority areas of Scotland, one of which was Orkney Islands (National Records of Scotland, 2021: 8). In 2016-20, suicide rates were relatively higher in Orkney Islands and the Western Isles, and lower in Shetland Islands, compared to across Scotland (see Table 1).

2.4 Mental health services and support in the Scottish islands

The 56 inhabited Scottish islands are covered by six of the 32 council areas in Scotland – North Ayrshire, Argyll & Bute, Highland, Western Isles (Na h-Eileanan Siar), Orkney, and Shetland – and by five regional NHS Health Boards – NHS Ayrshire & Arran, NHS Highland, NHS Western Isles (NHS Eileanan Siar), NHS Orkney and NHS Shetland.

Mental health services and support are provided by the National Health Service (NHS), through general practitioners in primary care, and through specialist practitioners in psychological services operating in the community and in hospital settings. Additional services and support are provided by a mix of organisations in the private and third sectors, including private clinics, individual counsellors, care homes, charities, social

Table 1: Suicide deaths registered in Scotland 2016-2020

	Persons	Crude rates per 100,000 population 2016-20
SCOTLAND	3830	14.1
Shetland Islands	9	7.8
Orkney Islands	21	19
Western Isles	24	17.9

Source: Public Health Scotland, *Suicide deaths registered in Scotland, 2016-20, by Local Authority, using new coding rules. Table 1 Overview: Numbers, crude rates and EASRs (all ages)*. <https://www.publichealthscotland.scot/publications/suicide-statistics-for-scotland/suicide-statistics-for-scotland-update-of-trends-for-the-year-2020/>

enterprises, and small businesses. The NHS provides both pharmaceutical and non-pharmaceutical treatments, as well as care delivered in-person and remotely via telehealth services. For example, the Near Me/Attend Anywhere video-conferencing platform is used in NHS Highland and nationally across other Scottish Health Boards for consultations in primary and secondary care across many specialisms.

In some of the island groupings, specialist mental health services are provided not by the local Health Board but by a NHS partner. For example, as shown in Figure 1, some residents in Orkney Islands and Shetland Islands access specialist mental health services through NHS Grampian (e.g. Aberdeen clinics) through a mix of in-person and video consultations. Some residents in the Western Isles receive specialist in-patient care through NHS Greater Glasgow and Clyde. Within NHS Highland, residents on the Isle of Skye will be some distance away from relatives and friends while an in-patient in New Craigs Psychiatric Hospital on the outskirts of Inverness on the east coast. For patients who are distressed, transport between islands and from island to mainland, and across mainland, to places of safety and specialist care can be long in duration and challenging for them and those accompanying them by air ambulance, ferry, and/or road.

The NHS also commissions some services from third sector organisations, while other groups operate independently in the community. In recent years, there has been a growing emphasis on providing non-medical interventions for people with relatively low-level or sub-threshold mental health symptoms, increasingly by social prescribing. There has also been a shift to promoting activities to tackle social isolation and promote mental wellness in whole communities, again often involving third sector organisations, as well as small businesses and other organisations, such as local heritage groups. Often these initiatives focus on improving connectivity of people in communities, either in-person, digitally, or both. They can also involve some level of physical work, such as exercise indoors or outdoors, or manual work with the hands, such as archiving cultural artefacts or craft work.

2.5 Mental health policy and the Scottish islands

A number of policies addressing mental health and wellbeing have been published by the Scottish Government over the past decade, along with policies regarding Scotland's island populations, which include reference to mental health and wellbeing.

In 2017, Scottish Government published its national *Mental Health Strategy 2017-2027*, in which it refers to its ambition for:

'a sustainable health and social care system which helps to build resilient communities. There needs to be a strategic shift towards recovery models focused on assets, strengths and self-management. This is fundamental not only to how mental health services are designed and provided, but fundamental to the design and provision of all services that have the potential to improve mental health and wellbeing. This goes substantially beyond the scope of health services' (Scottish Government, 2017: 35).

A year later, Scottish Government published *A Connected Scotland*, in which it addresses the problems of social isolation and loneliness, noting:

'We know that social isolation and loneliness manifest themselves in different ways in urban and rural communities. We want to develop our understanding of the differences in rural communities, and will therefore look to explore this further through engagement with bodies like Scottish Rural Action and Scotland's National Rural Mental Health Forum. Following the passage of the historic Islands (Scotland) Act in May 2018 to address the particular opportunities and challenges for island communities, we will seek to develop close links with the developing national islands plan and consider how relevant commitments in this Strategy can be 'Island-proofed' to ensure their effectiveness in those communities.

We will also seek to ensure that work to identify and roll out good practice approaches to address social isolation and loneliness explicitly reflects the rural dimension and acknowledges that different solutions may be required in rural and island settings.' (Scottish Government, 2018: 31–32)

In the same year, it also published six public health priorities for Scotland for the next decade, which included 'good mental wellbeing' among them (Scottish Government, 2018).

Following the 'Our Islands, Our Future' campaign begun in 2013 by Scotland's three island councils, and the publication of the 'Framework for the Islands' (UK Government, 2014), Scottish Government consulted with residents of the Scottish islands and developed policies to sustain these populations. These policies cover all aspects of island life, including mental health and wellbeing. For example, one of the objectives of the *Empowering Scotland's Islands Communities* prospectus is 'Enhancing the wellbeing of island communities' (Scottish Government, 2014). The *Islands (Scotland) Bill 2018* includes proposals for 'improving and promoting health and wellbeing' (Burn-Murdoch, 2017). Chapter 8 of *The National Islands Plan* is on health and social care and wellbeing,

and Strategic Objective 7 is to 'To promote health, social care and wellbeing' (Scottish Government, 2019). The Plan also includes a commitment to:

'Work with our partners to consider a range of options to ensure that adequate mental health care is available, whilst taking into consideration the uniqueness of our island communities' (Scottish Government, 2019: 49).

In 2021, the Scottish Government set out the *National Islands Plan Implementation Route Map 2020-2025*, with 11 outcomes defined for Strategic Objective 7, including outcome 7: 'For anyone that requires any mental health care, that it is readily available and accessible' (p.29).

Taken together, these various initiatives signal a growing emphasis on approaching mental health and wellbeing as a social issue and in a holistic and place-based way. The policies regarding the islands also recognise the importance of considering how residents' positive and negative experiences of mental health, and their access to and use of health and social care services, are shaped by the unique characteristics of island communities.

2.6 Related reviews and research

There have been no previous literature reviews on mental health and wellbeing in the Scottish islands.

An international review of health care on small islands was conducted in 1994 for the World Health Organisation (Hotchkiss, 1994). Although the review is now dated and about health care in general and does not refer to any of the Scottish islands, the author does provide some insights into what it is about islands that makes them unique:

'Each island occupies a unique niche in the multi-dimensional matrix of size, distance from larger land masses, climate, population, self-reliance, relative wealth, whether the island is a single island or part of an archipelago, and extent of cultural isolation.' (Hotchkiss, 1994: 3)

Hotchkiss also identifies six of the common and perennial challenges in providing health care to small island communities across the world, namely: communication difficulties; small populations lacking the critical mass needed to make specialist provision viable locally; achieving a balance between on- and off-island care; difficulties with recruitment and retention of staff; professional isolation; susceptibility to epidemics of infectious diseases and possibly issues relating to lack of genetic diversity in the indigenous population.

She also identified nine desirable features in health care systems on islands: orientation towards primary care; accessibility; generalist practitioners; training of non-medical staff to assess when medical attention is needed; channels of communications for expert advice; links with larger centres for training and to avoid professional isolation; regional cooperation; respect for local practices; and flexibility in staffing and working arrangements (Hotchkiss, 1994).

In the wider international literature, a few studies have examined mental health and wellbeing in other island contexts, particularly in relation to the impacts of climate change (e.g. Asugeni et al., 2015; Crichton, Esteban, and Onuki, 2020; Ebi, Lewis, and Corvalan, 2006; Gibson et al., 2020; Hernandez, Pereira, and Barbosa, 2018; Robinson, 2020; van der Ploeg et al., 2020) and the psychological impacts of the Covid-19 pandemic (e.g. Ripoll et al., 2021; Sindico et al., 2020).

In the UK and internationally, there is also a larger literature on mental health and wellbeing in remote and rural areas, some of which encompasses island communities. This includes studies in Scotland which contain important findings about mental health and wellbeing across rural and remote regions, some of which include island populations, but which do not report results by individual island/s or island grouping/s (in some cases, presumably because of low numbers) (e.g. Allwood, 2020; Lyons, 2021; NHS Highland, 2021; Porter et al., 2019; Skerratt, 2018).

Related to this, much of the research on remote and rural communities in Scotland uses variations of the Scottish Government's Urban Rural Classification system (<https://data.gov.uk/dataset/f00387c5-7858-4d75-977b-bfdb35300e7f/urban-rural-classification-scotland>) as a framework for sampling and reporting results. This classifies the location of populations by relative access (in terms of distance and time) from centres and density of population. However, it does not, when used by itself, indicate whether participants are island-based or not.

Recent research commissioned by the Scottish Government has explored the different typologies and classifications used to describe Scotland's rural areas, to inform the forthcoming National Planning Framework (NPF4), looking ahead to 2050 (Dalglish et al., 2020). One of the conclusions of this research was that:

'In order to support place-based approaches to policy, rural typologies should take account of the particular needs and challenges of different areas, as well as their assets and opportunities and their functional links to other areas.'
(Dalglish et al., 2020: 2)

The authors suggest that the Scottish Government's 8-fold Urban Rural Classification is a relevant and appropriate basis for characterising rural Scotland for the purposes of the NPF4 and should be used as a starting point for the process, but that the basic rural categories may need to be modified and adapted to ensure they are relevant for planning purposes. They recommend that:

'Island and Sparsely Populated Areas should be represented as distinct types of rural area in the picture of rural Scotland used in the preparation of NPF4. This will serve to differentiate those types of area from other Remote rural areas, on the basis of their differing needs, challenges and opportunities, thus supporting the development of place-based policies.' (Dalglish et al., 2020: 2-3)

This advice could usefully be adopted by researchers too, to ensure that evidence is clearly attributable to individual island/s or groupings (providing the identity of individuals cannot be inferred from any contextual information or data linkages).

3. Methods

3.1 Type of review

A mapping review (Cooper, 2016; Perryman, 2016) was undertaken to improve understanding of the state of the art of research on mental health and wellbeing in the Scottish islands.

Mapping reviews are a form of literature review that involve identifying and documenting the size, spread and nature of research on a given topic. They can be used to highlight gaps in research coverage, as a precursor to narrative or systematic reviews of evidence from a sub-set of the literature, and to inform policy makers' decisions about future research priorities (e.g. Ibragimova and Zuzak, 2020). They also provide a convenient resource for researchers to use to locate previous works and build on them.

While mapping reviews share some similarities with scoping reviews (Arksey and O'Malley, 2005), they differ in that they do not involve synthesising the findings in a narrative, and they do not involve any quality appraisal of the studies. Rather, it is the characteristics of the body of research that is the focus: when and where the studies were done, who did them, who and what they examined, what approaches were used, and what kinds of evidence, on what topics, were produced. The main output is a table of works (or database) of the literature, containing information about the individual studies, and an associated profile of the characteristics of the works on the topic.

There are different types of mapping reviews, such as 'systematic mapping' studies (e.g. Bates, Clapton and Coren, 2007) and 'focussed mapping review and synthesis' reviews (Bradbury-Jones et al., 2019). While they tend to focus on empirical studies and share common features, they vary slightly in their approach. For the purposes of this review, the basic mapping approach was tailored to:

- fit the broad and intersectional nature of the present topic;
- include grey literature as well as works indexed in academic databases;
- include commentaries, conceptual and methodological works, as well as empirical studies;
- provide brief synopses of individual works and a note of any linkages to index studies;
- provide a classification of the works, organised by the island groupings;
- provide general observations on the overall state of the art of research on mental health and wellbeing in the Scottish islands;
- fit the short timescale for the review.

3.2 Sources, search strategies and screening

From the outset, it was recognised that relevant research works were likely to be published by academics, third sector organisations, public bodies, and government departments, in the form of journal articles, book chapters, reports and theses. While some of these works would be indexed in academic databases, others would be located on organisations' websites, requiring different search strategies for these respective sources. It was also recognised that some relevant material would be located within works covering a wider geographical area (e.g. the Highlands, Scotland, United Kingdom) and/or on associated topics (e.g. social isolation, rural poverty, telehealth) and that these, too, required wider search strategies than would normally be used for, say, a systematic review addressing a specific research question.

Accordingly, to identify academic publications, five databases were searched for works indexed in them (CINAHL, Medline, Psychinfo, PubMed and Web of Science). Google Scholar was used to search for works by selected academic authors, and to perform forward citation checks on selected publications. The British Library EThOS database was also searched for relevant PhD dissertations.

To identify grey literature, over 80 websites were individually searched, including those of third sector organisations, NHS health boards, Local Authority councils, university repositories, professional bodies, and island organisations. These searches were supplemented by searches on internet browsers using the Google online search engine. Requests for details of relevant reports to be sent to us for consideration were also issued via the Scottish National Rural Mental Health Forum on three occasions.

The searches were conducted in January and February 2022 using search strings and various combinations of search terms, adapted for each source. Given the limited time for conducting the review (initially 3 months, later extended by 2 weeks), a strategic approach to defining the search strings was adopted. To identify which search strings worked best (in terms of returning the most relevant items and the fewest irrelevant ones), different variations of the search strings were experimented with on CINAHL and MEDLINE and the chosen strings were then adapted for use in searches of the other databases.

The search strings used for CINAHL and Medline were structured around the population of interest (residents of the Scottish islands) and phenomena of interest (mental health and wellbeing, as self-defined in the works, and related terms) and had no date limit. Our inclusion and exclusion criteria are summarised in Appendix A and a sample search string (for Medline) is provided in Appendix B.

Searches of academic databases generated a list of titles of candidate works. The titles and abstracts of these works were screened against the eligibility criteria and the full text of potentially relevant works were located for final screening. Searches of websites and email requests to key contacts for grey literature led to the identification of additional reports which were screened in the same way.

3.3 Data extraction and mapping

Details of the included works were entered into an Excel spreadsheet to facilitate the profiling of the literature by island groupings. The spreadsheet included information about the key characteristics of the research (where and when conducted, by whom, which population(s), which island grouping(s), design and methods, topics covered, key points, linkages between works). The files were also uploaded to EndNote to enable a bibliography to be generated.

The works were then sorted into island groupings for reading and mapping. A summary profile of each of the works was produced in tabular form by the different island groupings. Finally, a note of the research activities by island groupings, and common themes and gaps in the overall literature, was compiled.

3.4 Challenges and limitations

The process of experimenting with search strings for the five academic databases to optimise hits in the timeframe for the review was challenging and took several iterations. We settled with searching for combinations of terms within title and abstract fields only, using island grouping names and individual island names to maximise returns where these were specifically mentioned in these fields. This strategy minimised the large number of false returns that were generated when including the main text field, often due to authors' or institutes' names being mentioned in the text that shared the same name as an island (e.g. 'Harris'). It may, however, have led to some relevant works being missed.

Using the Google search engine did lead to some hits but these returns will reflect how well (or not) the websites were optimised for search engines to crawl and index. Searching individual websites for relevant works was time consuming but did lead to additional works being discovered. The search facilities on the websites were variable and a range of key terms were used depending on the context: island/s, mental, wellbeing, social isolation, loneliness, Western Isles, Hebrides, Orkney, Shetland, Skye, Bute, Arran. These terms were usually used singly, in turn, unless there was an option for more advanced searching using combinations of terms.

Screening of the works was guided by the inclusion and exclusion criteria. However, some of the criteria, such as judging what was a 'passing mention' to the phenomena of interest in a wider work did involve some interpretation on the part of the reviewer and a second reviewer was not involved in the process of deciding what was included or not.

In keeping with the terms of a mapping review, the quality of the studies was not appraised, and the evidence from the studies was not synthesised. Rather, the review was designed to profile the works by the different island groupings and to provide some general observations about the state of the art of research on the topic, including notable trends and gaps. One issue that was noted though, was that island residents were sometimes included in wider samples but the data analysis and/or reporting

was not always clearly broken down in a way that differentiated the results by islands. Similarly, sometimes quotations were labelled in a way that enabled readers to see if the resident was from an island or not, but this was not always the case.

While the review goes some way to advancing understanding of the extent, spread, and nature of research activities on mental health and wellbeing in the Scottish islands, it does not purport to be a systematic review or a complete record of all research activities on the topic. With this caveat, it is hoped that the review will provide a useful baseline and reference point for policy makers and researchers going forwards.

4. Findings

4.1 Overview

A total of 80 works linked to 53 studies published between 1977 and 2022 were identified with relevant content on the topics of mental health and wellbeing attributable to one or more of the Scottish islands. One study alone gave rise to 15 works, all relating to the Isle of Skye (study ID 9).

The works included 38 journal articles, 34 reports, two book chapters, and six PhD theses. Most were empirical in nature, with a few commentaries, conceptual and methodological pieces.

Relevant works were found for each of the island groupings, although the coverage was variable in terms of both the number of works (and associated studies) and nature and extent of the focus on mental health and wellbeing and/or the island context. A summary of the geographical coverage of works is shown in Table 2.

Table 2: Geographical coverage of works and index studies by island groupings

Island grouping	N works	N studies
'National' and 'all Scottish islands'	6	6
Shetland Islands	16	12
Orkney Islands	7	6
Western Isles	37	28
Isle of Skye and The Small Isles	19	5
Islands off Argyll coast	4	4
Islands off North Ayrshire coast	2	2
'Anonymous' islands	3	3
Total*	94	66

* Note: the totals are greater than the total number of works (N=80) and associated studies (N=53) because some of them covered more than one island grouping.

There were five 'national' studies that reported results at Health Board level, including the three Scottish island Health Boards (i.e. Shetland, Orkney and Western Isles). Only one study was found that focussed on all the Scottish islands exclusively (Wilson et al., 2021), although several other studies covered two or more of the island groupings (e.g. as case studies).

The Western Isles had the best coverage in terms of number of works, with 37 works (from 28 studies), followed by the Isle of Skye and The Small Isles with 19 works (from just five studies), Shetland Islands with 16 works (from 12 studies), Orkney Islands with seven works (from six studies), islands off the Argyll coast with four works (from four studies), and islands off the North Ayrshire coast with two works (from two studies). In three works, the names of the Scottish islands had been anonymised.

Three works included another part of the United Kingdom - England (Prudo et al., 1981; Prudo et al., 1984) and Northern Ireland (Terje, Munoz and Bailey, 2019) - and one included an international comparison with rural communities in Alberta, Canada (Daly, 2014).

These findings are indicative of variable levels of research activity within and across the different island groupings. However, they may also partly reflect the relative ease of identifying works with content attributable to the three island Health Boards (Shetland Islands, Orkney Islands and the Western Isles) compared to the islands off the Argyll and North Ayrshire coasts, and the Isle of Skye and The Small Isles. In the latter cases, the Health Boards and councils cover both islands and mainland areas, and reported results are not always clearly broken down by and/or attributable to the island/s sub-populations, making it harder to locate them.

In the following sections, the set of works identified for the different Scottish island groupings is profiled in more depth.

4.2. 'National' and 'all Scottish islands' - works

This section focuses on the works that were classified as 'national' studies (where results pertaining to the three island Health Boards (at least) were discernible in this context) and 'all Scottish islands' studies. Other works that spanned different combinations of island groupings are described under their respective headings in subsequent sections.

Five works were classified as national studies, including two journal articles and three reports, published between 2004 and 2020 (see Table 3). The articles were both secondary studies, one examining the relationship between indoor second-hand smoking and children's mental health using data from the Scottish Health Survey (Shiue, 2013), and the other analysing suicide trends between 1981 and 1999 using the records of the General Registrar Office (Stark et al., 2004). The reports examined the experiences of LGBT people in Scotland's rural communities (Crowther, Cuthbertson and Valentine, 2020), experiences of mental health in rural communities (Skerratt, Meador and Spencer, 2017), and the costs of delivering health services in Scotland (Sutton et al., 2006).

Table 3: National and all Scottish islands - mental health (MH) and wellbeing (WB) works

ID	1st author	Year	Source	Article / report title	Synopsis
11	Stark	2004	BMC Public Health	Trends in suicide in Scotland 1981 - 1999: Age, method and geography	<p>Analysis of deaths by suicide in Scotland 1981-1999. Found 14502 deaths recorded as suicide or undetermined cause. There was substantial geographical variation. The highest male rates were in Western Isles, Highland, Orkney, Greater Glasgow and Tayside. Standardised Mortality Ratios for Western Isles, Highland and Greater Glasgow were statistically significantly elevated.</p> <p>Male rates increased in all 15 NHS Board areas over the period. The smallest percentage increases were in Orkney, Highland and Greater Glasgow, three of the areas with the highest male rates in the first time period. Shetland and Western Isles had large percentage increases, but this was based on small numbers of suicide and undetermined cause deaths.</p>
16	Sutton	2006	Report	Geographic differences in the costs of delivering health services in Scotland: Implications for the national resource allocation formula	<p>Reviews the Arbutnott Formula remoteness adjustments for hospital and community services and the evidence for inclusion of other unavoidable excess costs of supply, such as market forces. For hospital services, finds the ratio of local to national average costs increases consistently with remoteness and rurality. Remote areas impose 10% higher costs than the average and islands increase costs by 50%. Notes that island residents have the highest average lengths of stay (p.122). Suggests that an area classification that identifies island populations separately be adopted (p.31).</p>
27	Shiue	2015	Envi Sci Pollu Res	Correlations of indoor second-hand smoking rules, regional deprivation and children mental health: Scottish Health Survey 2013	<p>Examines the relationships between indoor second-hand smoking, household smoking rules, deprivation level and children's MH in Scotland, using data from the Scottish Health Survey 2013. Notes that the Western Isles is in the top 3 sub-regions with indoor smoking allowed. Reports results for Orkney, Shetland and Western Isles, and other Scottish sub-regions.</p>

ID	1st author	Year	Source	Article / report title	Synopsis
32	Skerratt	2017	Report	National Rural Mental Health Survey Scotland: Report of key findings	<p>A national survey of rural MH experiences. 343 responses from people experiencing mental ill health across rural Scotland. Proportionately high levels of responses from other areas including Highlands, Orkney, Shetland Islands. Reports views from the island respondents re 'If you could change ONE THING about mental health services in rural Scotland, what would that be and why?', and for: 'What KEY MESSAGE do you want to tell policy-makers to help you manage your mental ill health in a rural setting?' For respondents who self-reported suicidal thoughts and feelings, services on the islands were felt to be particularly needed, given anecdotal reports of a rise in suicides and there was concern re suicide rates in Orkney.</p> <p>Found an important distinction between respondents' actual geographical remoteness (based on postcodes) and their perceived or experienced geographical remoteness. This was also linked with distance to MH facilities, and ease of access to public transport.</p> <p>Found that 'community' can be a 'double-edged sword' (p.42, p.60) by being close and strong for some, while being judgemental and parochial for others, directly affecting who people turn to for help.</p>
42	Crowther	2020	Report	Further Out: The Scottish LGBT Rural Equality Report	<p>Examines the experiences of LGBT people in Scotland's rural regions. 284 respondents aged 15-74 completed an online survey, 14 community events and street stalls were facilitated in rural and island Scotland, including all 'major' islands.</p> <p>Found diverse and varied experiences. Describes what contributes to the 'minority stress' of LGBT people in these areas and their wellbeing. Some findings are linked to qualities of islands or individual islands. Quotes are often labelled with a geographical marker eg town or island (if data available), so it is possible to attribute comments to island groupings.</p> <p>Notes a lack of research evidence on correlations between MH and living rurally, especially with a focus on LGBT communities, and a lack of experiential research or qualitative data in this area.</p>

ID	1st author	Year	Source	Article / report title	Synopsis
52	Wilson	2021	Report	National Islands Plan Survey: Final Report - Agriculture, Environment and Marine	<p>Describes findings of a survey that gathered data relating to the objectives of Scotland's National Islands Plan (2019). The survey gathered the views of island residents to improve the islands' evidence base and help measure progress towards the Plan's strategic objectives. In Oct 2020 the survey was sent to 20,000 adult residents of 76 permanently inhabited islands and had 4,347 respondents (22% RR). The survey sampling framework used customised definitions of island sub-regions to enable appropriate geographical groupings of islands and analysis of spatial differences in characteristics and perceptions.</p> <p>Found that experiences of island life vary considerably by island group and by age groups. With re to health, social care and WB, it found striking differences in reported levels of access to health, social care and WB services between the island groups. Perceived access to MH services was low, with a large degree of uncertainty about what services were available. With re to communities, it found island residents generally have a strong sense of belonging to their local area, but sense of community is stronger in some areas than others.</p> <p>Suggests that any recommendations or policies should recognise that life is considerably different in each island group and that different age groups, too, have distinct experiences of island life. Therefore tailoring to each island group and different age groups seems appropriate. (p.4)</p>

Selected findings - 'national' studies

- Over the period 1981–1999, there was substantial geographical variation in suicide rates across Scotland. The Western Isles and Orkney Islands were among the areas with the highest male rates (Stark et al., 2004).
- In 2017, survey respondents in a Scottish national rural mental health study identified a need for services for those who reported having suicidal thoughts and feelings, and expressed concerns about suicide rates in Orkney (Skerratt, Meador and Spencer, 2017).
- In 2020, a national study of LGBT people living in rural Scotland, including all the 'major' island groupings, found that the stigma of being LGBT in a rural area can have a negative impact on wellbeing and poor mental health. The 'minority stress' experienced by some of the island respondents is illustrated by several quotes included in the report (Crowther, Cuthbertson and Valentine, 2020).

One study was unique in focusing exclusively on all the Scottish islands (Wilson et al., 2021). This research was a survey commissioned by the Scottish Government to inform the ongoing implementation of the National Islands Bill. One of the aims of the research was to provide baseline data for future evaluations of the impact of strategies connected to the policy. The report includes vital data, as well as a link to an online interactive data explorer, on a variety of topics relating to island life, including mental health and wellbeing. An important feature of the report (and the online tool) is that data is broken down into sub-island regions, enabling variations to be examined within and across island groupings. It used customised geographical groupings, dividing the Scottish islands into nine sub-regions.

Selected findings - the 'all Scottish islands' study (Wilson et al., 2021)

- The survey was conducted in October 2020 and examined adult residents' (pre-Covid) experiences of living on the Scottish islands. There were 4347 respondents from 59 islands (a 22% response rate).
- It found that most island residents (82%) see themselves as belonging to their local community.
- The majority (84%) also agreed that there were physical spaces where the community could come together.
- A lower proportion agreed that there was a strong sense of community (69%).
- In each case, there were statistically significant variations between sub-areas. For example, people aged 18-35 were less likely to agree that they felt they belonged to their community (77%) than the other age groups; and higher rates of people on Shetland Outer isles agreed there was a strong sense of community there (81%), compared to the lowest rate in Lewis and Harris (64%).

- It also found that perceived access to mental health services was low, with a large degree of uncertainty over what services were available. Overall, one-quarter of island residents agreed that they could easily access mental health services. However, there was considerable variation between islands, with agreement being highest in Lewis and Harris (32%) and lowest in Shetland Outer isles (18%).

4.3 Shetland Islands

A total of 16 works (from 12 studies) were identified (in addition to the works classified as 'national' or 'all Scottish island' studies described above). These works comprised 11 journal articles, three reports, and two PhD theses, published between 1978 and 2021 (see Table 4).

The main topics examined were the impacts of social change (4 works), telehealth (4 works), alcohol consumption (3 works), and dementia (2 works). Other topics covered were psychiatry, public health, wind farms, and climate change.



Selected findings - Shetland Islands

- Four works published between 1978 and 1988 were linked to the 'Scottish Health Study' (Study ID 2a & 2b). This was a longitudinal study led by academics based in the United States (Caetano et al., 1982; Rosen and Voorhees-Rosen, 1978; Voorhees et al., 1989) and a related critical review (Seyfrit, 1988). It was designed to examine the effects of rapid social change (associated with the development of the oil industry on Shetland) on the mental health and wellbeing of the population. It found the impact was minimal.
- Three works were from early pilot studies of the acceptability and feasibility of delivering psychological services to the residents of the islands remotely, by videoconferencing from an Aberdeen-based clinical psychology service. The evaluations were generally positive (Simpson, 2001; Simpson, Deans, and Brebner, 2001; Simpson et al., 2002).

Table 4: Shetland Islands - mental health (MH) and wellbeing (WB) works

ID	1st author	Year	Source	Article / report title	Synopsis
2a	Caetano	1982	Brit J Addiction	The Shetland Islands: Drinking patterns in the community	An article from the Shetland Health Study. Aim was to assess effect of rapid social change on MH and social WB of Shetland adult population. Prospective study. Target and control group. Baseline 1975; follow-up 1978. 498 participants in 1975. Examines drinking patterns in relation to self-reported psychiatric and psychosomatic symptoms. Results suggest an inverse association between number of psychiatric symptoms and abstinence. There were no significant associations between psychiatric symptoms, psychosomatic symptoms and drinking.
2a	Rosen	1978	Culture, Med & Psychiatry	The Shetland Islands: The effects of social and ecological change on mental health	An article from the Shetland Health Study. Aim was to assess effect of rapid social change on MH and social WB of Shetland adult population. Baseline study in two populations (total N=533), starting 1975, first follow-up due 1978. The two populations are target population living near Sullom Voe oil complex and a control population living in a conservation area.
2a	Voorhees	1989	Acta Psychia Scand	Shetland: Psychiatric symptoms and alcohol consumption in a community undergoing socioeconomic development	Critical discussion of studies of rapid social change, which mentions studies of the impact of the oil industry on Shetland, including the Shetland Health Study. Claims studies of impacts of rapid social change focus on predictions rather than actual impacts. Suggests a need for more empirical post-impact studies.
2b	Seyfrit	1988	Sociological Inquiry	A need for post-impact and policy studies: The case of the "Shetland Experience"	An article from the Shetland Health Study. Aim was to assess effect of rapid social change on MH and social WB of Shetland adult population. Tests hypothesis that those living closer to the oil development would report higher levels of psychiatric symptoms. Found impact on MH was minimal. Suggests results support the view that social change is not inherently deleterious to MH.
4	Rix	1982	Brit J Indus Med	Incidence of treated alcoholism in north-east Scotland, Orkney, and Shetland fishermen, 1966-70	Examines rates of treatment for alcoholism in fishermen and non-fisherman in NE Scotland 1966-1970, including Orkney and Shetland. Found the fishermen had higher rates of alcoholism in each year, 1966-1970. The average rates for fishermen were more than two and a half times the rates for non-fishermen in general, and more than three times the rate of other men in social class IV, to which most fishermen belong.
7	Simpson	2001	J Telemed & Telecare	The provision of a telepsychology service to Shetland: Client and therapist satisfaction and the ability to develop a therapeutic alliance	Pilot study of feasibility and acceptability of videoconferencing as a means of delivering a clinical psychology service in Shetland by an Aberdeen-based service. 10 clients attended sessions at Lerwick Health Centre, where a room was equipped with a PC operated by secretarial staff. Assessed client satisfaction, WB, symptoms.

ID	1st author	Year	Source	Article / report title	Synopsis
7	Simpson	2001	Clin Psychol & Psychother	The delivery of a tele-psychology service to Shetland	<p>Evaluation of a pilot project delivering clinical psychology service from Aberdeen to Shetland using teleconferencing.</p> <p>Sample included 10 clients, aged 30-58, who attended 2–20 sessions each. Assessed client satisfaction, WB, symptoms.</p> <p>Suggests teleconferencing may have potential as a means of delivering psychological treatments to people living in remote areas. Further investigation is needed re whether certain types of clients and types of problems may be more or less likely to benefit from the approach. And whether an initial face-to-face meeting to build rapport helps, and if assessments can be done adequately via teleconferencing.</p>
10	Simpson	2002	J Telemed & Telecare	Video-hypnosis - the provision of specialized therapy via videoconferencing	<p>Pilot study of feasibility of delivering hypnosis via videoconferencing.</p> <p>11/15 clients accepted the offer of 1 session of video-hypnosis with a clinical psychologist based in Aberdeen. Clients attended sessions at Lerwick Health Centre, Shetland.</p> <p>10/11 found it helpful. All indicated they would like further video-hypnosis sessions in future. 4 clients expressed a preference for video-hypnosis over face-to-face; 3 had no preference.</p> <p>The psychologist had to adapt to each client e.g. adjusting zoom, volume. The screen image and sound quality were generally rated as high quality.</p>
12	Thein	2004	Thesis (University of Edinburgh)	Intimate distances: Geographies of gender and emotion in Shetland	<p>Examines the WB of women, and the intersection of place, geography and emotion, in the Shetland Isles.</p> <p>Chapter 5 discusses concepts of happiness, balance; self-management of emotional WB; gendering of emotional WB; placing of emotional WB; narrating emotional WB and more. It also discusses experience of depression and sense of belonging.</p>
20	Innes	2012	Report	Evaluation of tele-psychiatry as part of a memory service for people with dementia living in Grampian and the Shetland Islands: Final report	<p>An evaluation of the experiences of people with dementia and their carers in Shetland using a tele-psychiatry service, and the Grampian-based clinicians delivering the service.</p> <p>7 people with dementia who had used videoconferencing (VC) and 3 clinicians were interviewed to identify their views of the memory services and the place of VC in the delivery of the service.</p> <p>Views were compared with those who travelled to the service for direct consultation.</p> <p>Differences in views were found between clinicians who used VC for Shetland and mainland consultations, and within the sample of users and carers.</p> <p>It was suggested that clinicians take account of individual preferences and abilities of memory service users when offering VC, clinic or home visit appointments.</p>
22	Vaitheswaran	2012	Adv in Psychia Treatment	Telemental health: Videoconferencing in mental health services	<p>Examines the use of videoconferencing in mental health services.</p> <p>Describes 3 case studies from Scotland - eating disorders (NE Scotland & Northern Isles); adult psychiatry service (Orkney); dementia service (Shetland).</p>

ID	1st author	Year	Source	Article / report title	Synopsis
23	Taylor	2013	Report	Report on the health impacts of wind farms Shetland 2013	An NHS Shetland report examining the health impacts of wind farms. A literature review was done to inform a Health Impact Assessment. Different types of health impacts are considered, including 'noise and sleep disturbance', and 'mental health and wellbeing including stress and annoyance'. It finds the evidence to be inconclusive. It recognises that, regardless of the cause or mechanism, noise from wind farms can cause adverse health effects through sleep disturbance, reducing QoL, and as a source of annoyance which sometimes leads to stress-related symptoms. It recognises that current mitigations do not entirely deal with annoyance caused by wind farms.
34	Scholtz	2018	BJPsych Int	Psychiatry in Shetland	Description of psychiatry provision for Shetland. Considers challenges and service changes leading to reduction in hospital admissions to Aberdeen 2015-2017.
35	Bowes	2018	Dementia	RemoDem: Delivering support for people with dementia in remote areas	Evaluation of potential technological solutions to providing care and services for people with dementia in remote areas in 6 test sites in 4 northern countries, including Scotland (Shetland and Western Isles). There were some common issues across sites e.g. stigma leading to shame and some social isolation. The technologies helped with communications in the sites sites, not only for service users and carers, but for staff working in remote areas too. The project highlighted the complexity of local circumstances in remote and rural areas in relation to dementia care. Whilst the sites each exhibited some of the challenges reported in the literature, these differed in their expression between contexts. Suggests there are benefits of taking a cross-contextual approach which enabled local differences and common challenges to emerge.
38	Cunningham	2019	Thesis (St Andrews)	Adaptation to the impacts of climate change in small island communities: An analysis of Scottish case studies	Examines the adaptation of small island communities (Orkney, Shetland, Western Isles) to the impacts of climate change, including on health and WB. Considers community safety, WB, emotional stress, and other harms. Found that safety and WB were more of an issue on Unst & South Uist compared to Westray community. In South Uist a storm of 2005 had impacted the community (5 residents died in the South Ford causeway area); this experience influenced perception of safety and WB.

ID	1st author	Year	Source	Article / report title	Synopsis
51	NHS Shetland	2021	Annual report	Public Health Annual Report 2020-21	<p>NHS Shetland DPH Annual report for 2020-21. Recognises that the pandemic will have long-lasting physical and MH effects in the community; that lockdown and ongoing restrictions have impacted on MH. Commits to tackling the underlying causes of poor physical and MH. Refers to actions taken to help reduce likelihood of burnout, trauma and other longer term emotional consequences for care staff, as well as promotion of staff WB. Also refers to training delivered to 70 people (including health and social care staff, voluntary sector and Shetland Young Farmers) to raise awareness of MH issues, signs and how to respond, and plans to roll out to fire service and assist companies to develop suicide protocols and deliver training on self-harm to reach a wider audience. Acknowledges not meeting targets for delivery of Alcohol Brief Interventions, and that alcohol is a significant issue in Shetland.</p>

- An international study of the use of robots to assist with the care of people with dementia living in the community found that the technology helped with communications for both service users and staff. It also highlighted challenges that were common across study settings and identified a need for solutions that were sensitive to differences in the contexts of care (Bowes, Dawson, and McCabe, 2018).
- Both the Shetland Health Study, and another study of that era (Rix, Hunter, and Olley, 1982), as well as a more recent review of public health in Shetland (NHS Shetland, 2021), indicated that alcohol consumption was a significant issue.
- The NHS Shetland annual public health report for 2020–21 recognised that the experience of lockdown and the restrictions during the Covid-19 pandemic will have negatively impacted mental health, and that physical and mental health effects are likely to be long-lasting for communities. It also refers to measures being taken to address the longer-term emotional consequences of the pandemic for care staff (NHS Shetland, 2021).

4.4 Orkney Islands

Just seven works from six studies were identified for Orkney Islands (in addition to works classified as ‘national’ or ‘all Scottish islands’ studies described above). These included three journal articles, three reports, and one PhD thesis, published between 1982 and 2020 (see Table 5).

The main topic covered was telehealth (3 works). Other topics included alcohol consumption, public health, a general practitioner’s perspective, and climate change.



Orkney Islands. Including: Mainland, South Ronaldsay, Westray, Sanday, Hoy, Burray, Stronsay, Shapinsay, Rousay, Eday, Papa Westray, Flotta, North Ronaldsay

Selected findings - Orkney Islands

- With the exception of the NHS Orkney annual public health report for 2019–20, there were no empirical studies focussed solely on the Orkney Islands.
- The NHS Orkney annual public health report for 2019–20 (NHS Orkney, 2020) recognised that the Covid-19 pandemic is likely to have a negative impact on mental health. It identified mental health care as a priority for 2020–21.

Table 5: Orkney Islands - mental health (MH) and wellbeing (WB) works

ID	1st author	Year	Source	Article / report title	Synopsis
4	Rix	1982	Brit J Indus Med	Incidence of treated alcoholism in north-east-Scotland, Orkney, and Shetland fishermen, 1966-70	Examines rates of treatment for alcoholism in fishermen and non-fisherman in NE Scotland 1966-1970, including Orkney and Shetland. Found the fishermen had higher rates of alcoholism in each year, 1966-1970. The average rates for fishermen were more than two and a half times the rates for non-fishermen in general, and more than three times the rate of other men in social class IV, to which most fishermen belong.
22	Vaitheswaran	2012	Adv in Psychia Treatment	Telemental health: Videoconferencing in mental health services	Examines the use of videoconferencing in mental health services. Describes 3 case studies from Scotland - eating disorders (NE Scotland & Northern Isles); adult psychiatry service (Orkney); dementia service (Shetland).
30	Warner	2016	BJGP	Escape to the country: Challenges of a migrant population for the rural GP	Discusses the challenges of the in-migrant population on Orkney, including some GPs themselves. Refers to the 'push-pull' of migration, with migrants seeking a new home and better life, escaping from problems, and the prevalence of MH issues in the population. Notes the issues of lack of privacy, isolation, lack of supportive social network, climate. Refers to the beauty of Orkney and how the islands 'offer the opportunity for a healthy, active lifestyle in a stunning environment with multiple physical and psychological health benefits' (p.527) but also bring challenges.
38	Cunningham	2019	Thesis (St Andrews)	Adaptation to the impacts of climate change in small island communities: An analysis of Scottish case studies	Examines the adaptation of small island communities (Orkney, Shetland, Western Isles) to the impacts of climate change, including on health and WB. Considers community safety, WB, emotional stress, and other harms. Found that safety and WB were more of an issue on Unst & South Uist compared to Westray community. In South Uist a storm of 2005 had impacted the community (5 residents died in the South Ford causeway area); this experience influenced perception of safety and WB.

ID	1st author	Year	Source	Article / report title	Synopsis
41	Wherton	2020	Report	Evaluation of the Attend Anywhere / Near Me video consulting service in Scotland, 2019-20	<p>Evaluation of Attend Anywhere (AA) / Near Me video consulting system in Scotland. Involved 140 interviews with a sample of stakeholders from urban, rural, and island areas (Skye, Orkney, Western Isles).</p> <p>Results are not broken down specifically by island grouping but findings re 'islands' in sample are scattered throughout report (participants' quotes are labelled with e.g. 'GP, remote island practice').</p> <p>Across all Health Boards, psychiatry and psychology related services had highest uptake rate. Considers contextual issues influencing AA in Scotland, referring to alignment with 2019 National Islands Plan to improve QoL of island communities; it also refers to connectivity and digital literacy, noting there is high quality broadband in Western Isles but not yet a culture or using it. Also refers to mPower programme exploring links with AA.</p> <p>Recommends VC for counselling and similar services but not in cases of serious anxieties re using the tech (unless others on hand to help).</p> <p>Includes Table showing number of video consultations by Health Board for 2019.</p>
41	Wherton	2021	Report	Evaluation of the Near Me video consulting service in Scotland during COVID-19, 2020	<p>Evaluation of Attend Anywhere (AA) / Near Me video consulting system in the context of the COVID-19 pandemic, when the service was rapidly scaled up across a range of settings (primary care, outpatients, inpatients, care homes).</p> <p>Involved interviews with 83 stakeholders (36 of whom were in previous study of AA), from 8 of 14 HBs - a mix of urban, rural and islands (Orkney, Western Isles).</p> <p>The report includes sections by areas, including for Western Isles and Orkney. The former refers to supporting use of video consulting for CAMHS and other services.</p> <p>Suggests need to consider staff wellbeing, MH, supervision, and training as workforce issues for users of the system because of greater cognitive load on staff and loss of personal care for patients.</p>
44	NHS Orkney	2020	Annual report	Public Health Report 2019-20	<p>NHS Orkney DPH annual report for 2019-2020.</p> <p>Includes a section on 'Priority 3 An Orkney where we have good mental wellbeing', describing training that has been delivered e.g. the Scottish Mental Health First Aid' course; 'Sound of Mind'; 'The Well Programme'; and 'health coaching' to support improvement of health and WB, including MH such as stress and low mood.</p> <p>Recognises the COVID-19 pandemic is likely to negatively impact MH and that more public health action in relation to MH care, early intervention and equity of service and health in Orkney should be considered a high priority for 2020/21.</p>

4.5 Western Isles (Outer Hebrides)

For the Western Isles, 37 works were identified from 28 studies (in addition to works classified as 'national' or 'all Scottish islands' studies described above). These included 17 journal articles, one book chapter, 15 reports, and four PhD theses, published between 1977 and 2022 (see Table 6).

A wide range of topics were examined. The main topics covered were communities (8 works, including 2 on responses to the Covid-19 pandemic), depression (5 works), cultural heritage (4 works), telehealth (3 works), social prescribing (3 works), dementia (2 works), and fuel poverty (2 works). Other topics covered included public health, climate change, cancer distress, sensory impairment, social work, Celtic culture, children and young people's mental health, suicide prevention training, domestic abuse, access to primary care, development of a mental health questionnaire, and 'blue' health (in this case, the benefits of sea-kayaking).



Western Isles. Including: Isle of Lewis & Harris, South Uist, Benbecula, North Uist, South Uist, Barra, Great Bernera, Grimsay, Eriskay, Vatersay

Selected findings - the Western Isles

- A substantial proportion of the total number of studies identified (N=28/44, excluding the 'national' and 'all Scottish islands' studies, and the 'anonymous' studies) included the Western Isles, either as a single case study or as part of a wider study involving another island grouping/s.
- Four early works stemmed from a comparative survey of women aged 18–65 living in parts of the Outer Hebrides and an area of London, in the 1970s (Study ID 1). It found that there were links between the participants' experience of depression and anxiety and the nature of Hebridean women's traditional roles and degree of integration into the culture of the island (Brown et al., 1977; Brown and Prudo, 1981; Prudo et al., 1981; Prudo, Harris, and Brown, 1984).
- Three works were linked to research exploring the relationship between cultural heritage activities and mental health and wellbeing. It found that the work of doing heritage helps to bring people together and contributes to wellbeing, cohesiveness and resilience of communities (Beel and Wallace, 2014; Beel and Wallace, 2020; Wallace and Beel, 2021).
- A separate study on a similar topic, evaluating Phase 1 of the Inspiring Scotland's Creative Communities programme, which included three projects in the Western Isles (as well as other islands), also found that the activities had a positive impact on people's mental wellbeing (MacMillan, 2021).

- Other studies examined the inter-play between factors that positively and negatively influenced mental health and wellbeing and the qualities of island communities, such as residents' connections with communities and land, their sense of local identity, the stigma of mental health issues, and role of past experiences of local events (e.g. Blackstock et al., 2006; Bowes, Dawson, and McCabe, 2018; Chaplin, 2010; Cunningham, 2019; Maccaulay, 2019; Support in Mind Scotland, 2020).
- Since 2019, a series of studies have been published on the emerging practice of social prescribing (Study IDs 37, 40, 45). They generally found the projects to play an important part in improving wellbeing by, for example, addressing fuel poverty (Sherriff et al., 2019; Sherriff et al., 2020) and by connecting people and combatting social isolation and loneliness during the Covid-19 pandemic (Fixen, Barrett, and Shimonovich, 2021; Fixen, Barrett, and Shimonovich, 2022). One study also reported there was a culture of residents and staff embracing new information communication technologies (Terje, Munoz, and Bailey, 2019).
- Two works were linked to studies examining the impact of the Covid-19 pandemic on people living in rural areas, including the Western Isles (Currie et al., 2021; Glass et al., 2021). One of these studies found the loss of community services and face-to-face engagement was experienced in all the case studies, with negative impacts on social isolation and wellbeing, and with reduced access to mental health services compared to before the pandemic. While geographical peripherality was not the over-riding factor, there were concerns about feeling cut off in South Uist. There were also variations in the mapping of community resilience across the islands, with higher resilience scores being found for parts of the Western Isles (as well as for Shetland and Orkney Islands) (Currie et al., 2021). The other study found that the pandemic had had a positive transformational effect in terms of increasing community cohesiveness and support on the Isle of Harris (Glass et al., 2021).
- One study set in the Western Isles was unique in being the only one found to address children and young people's understanding and experiences of mental health and wellbeing in an island context. It found that having trusting relationships and support when needed were among the things that were key to this group feeling happy, healthy and safe at home, at school, and in their community (Children's Parliament, 2021).
- One study was notable in that it was the only one identified in this review with an explicit focus on the relationship between nature and wellbeing. In this case, it was a study of the benefits of sea-kayaking for wellbeing and vitality, drawing on the theory of salutogenesis (Kronsted Lund, Gurholt, and Dykes, 2020).

Table 6: Western Isles - mental health (MH) and wellbeing (WB) works

ID	1st author	Year	Source	Article / report title	Synopsis
1	Brown	1977	SJM	Psychiatric disorder in London and North Uist	Exploratory comparative study. Found much more depression in London; more anxiety & obsessional conditions in North Uist (p.372). Suggests the prevalence of anxiety and obsessional states is related to the traditional place of women on the island (p.374). Suggests 'anxiety may be a cultural characteristic of island women encouraged in part by their subservient domestic and marital role...' (p.374). Overall, suggests that social change brought about by 'modernisation' has resulted in two different psychiatric consequences - rise in anxiety in a small close-knit community, and high rates of depression among (working class) women living in cities (p.375).
1	Brown	1981	Psychol Med	Psychiatric disorder in a rural and an urban population: 1. Aetiology of depression	One of a set of articles reporting results of a socio-psychiatric survey of women aged 18-65 living in Outer Hebrides (North Lewis) and Camberwell, London. 355 women were surveyed (201 Lewis, 154 North Uist), in 1976, by interview. Examines two types of social factors thought to cause depression - major loss and disappointment, and vulnerability factors. Suggests that in Camberwell, high rates of clinical depression involved the least 'privileged', whereas on Lewis they involved those who were the least 'integrated' into traditional patterns of conduct (p.598).
1	Prudo	1981	Psychol Med	Psychiatric disorder in a rural and an urban population: 2. Sensitivity to loss	One of a set of articles reporting results of a socio-psychiatric survey of women aged 18-65 living in Outer Hebrides (North Lewis) and Camberwell, London. Examines 'provoking' agents or factors in depressive illness, such as death of a family member and cultural variations in attachment patterns; also analyses chronicity of cases, demographic factors and vulnerability. Found women in Outer Hebrides experience less environmental stress compared to Camberwell but the level of 'caseness' was the same in both groups. The authors' explain this 'sensitivity' and chronicity of depression to loss in terms of attachment theory and social ties, as well as limited roles available to Hebridean women.
1	Prudo	1984	Psychol Med	Psychiatric disorder in a rural and an urban population: 3. Social integration and the morphology of affective disorder	One of a set of articles reporting results of a socio-psychiatric survey of women aged 18-65 living in Outer Hebrides (North Lewis) and Camberwell, London. Examines how the form as well as the severity and course of affective disorders are related to the extent that Hebridean women are integrated into traditional island culture (p.327). Explains how the interaction between style of personal attachments and types of provoking event could produce variations in the morphology of affective disorder.

ID	1st author	Year	Source	Article / report title	Synopsis
3	Bloor	1978	Report	Island Health Care: Access to primary services in the Western Isles	Survey of consumer perspectives and service providers in the Western Isles (WI), by interview. Covers access to primary and secondary care, and referrals to specialist services. It notes specialist psychiatric services are not provided on the Isles, with patients being sent to Inverness. GPs reported problems with this - patients not having relatives or friends in Inverness; issues with escorting them there. In 1976, 169 patients from WI were admitted to mental hospitals and psychiatric units as in-patients. An estimated 700 attendances at mainland outpatient depts. An estimated 90 beds on WI would be required based on figures for Scotland as a whole. The report notes the existing shortfall of hospital facilities is difficult to justify.
5	Macritchie	1994	J Relig & Health	Celtic culture, Calvinism, social and mental health on the Island of Lewis	Discusses the incidence of depression among women in the Western Isles (Lewis) and how it relates to cultural factors.
6	Lauder	2000	J Psychia & MH Nurs	The development and testing of the Mental Health Problems Perception Questionnaire	Describes the testing of the Mental Health Problems Questionnaire, which was developed to help generalists working with patients with MH problems who live in rural communities. Involved a convenience sample of 82 district nurses practising in north of Scotland and the Western Isles. The instrument was found to be valid and reliable in this population.
8	MacNeil	2001	Report	Preventing domestic abuse in the Western Isles: The community perspective	Reviews research on domestic abuse; provides estimates of incidence in Western Isles and trends, including distribution by 6 islands in Western Isles in 1999; reports findings of community survey, community discussion groups, interviews.
14	Tearse	2005	Thesis (UHI/ Aberdeen)	Depressive symptoms in Ischaemic Heart Disease in the Western Isles of Scotland	Examines the prevalence of psychological morbidity and depressive symptoms among a sample of 100 general practice patients and a sample of 45 ischaemic heart disease patients living in the Western Isles.
15	Blackstock	2006	J Rural Studies	Living with dementia in rural and remote Scotland: Diverse experiences of people with dementia and their carers	Examines the experiences of people living with dementia and their carers in rural and remote Scotland. 15 service users and 30 carers were recruited from 8 rural areas of Scotland, including the Western Isles, Highlands, Argyll & Bute. Of these, 17 (5 service users and 12 carers) were listed as 'island' participants (but unclear which - except for one reference to a participant on Skye). Some findings are attributable to island-dwelling participants. Found dementia can be hidden in close-knit communities, particularly island and Gaelic communities, where they note a tradition of self-sufficiency and of closing ranks to help someone. There is further reference to both stigma and self-sufficiency as factors preventing service users and carers from accessing services, particularly among bilingual or island-based participants.

Synopsis					
ID	1st author	Year	Source	Article / report title	Synopsis
17	McLean	2007	Report	Evaluation of Scottish SafeTALK pilot	Evaluation of SafeTalk - a new half-day training programme helping participants to recognise and engage people who might be having thoughts of suicide & helping connect them with community resources. A 6m pilot was undertaken in 3 Local Authority areas, including Western Isles and Argyll & Bute. Results are not broken down by location but there are a few references to results specific to Western Isles.
18	Chaplin	2010	Thesis (Glasgow)	Health and wellbeing in an island community where urban style deprivation and traditional rural values interact	Examines health inequalities in the context of an urban neighbourhood in a remote rural island (the Creans housing area of Stornoway, Western Isles) and the effects of cultural influences on health and the social environment. Found evidence of traditional networks and a strong sense of island identity. Examines residents' understanding of health and WB. Refers to stigma of MH issues in the community. Refers to some Hebridean characteristics or traits e.g. 'suppression of feeling, disinclination to show emotions and a reluctance to talk about personal situations, especially if family members were involved' (p.230). Tentatively supports other work on rural MH suggesting that social isolation exacerbates vulnerable individuals turning to alcohol or drugs.
21	Martinez-Brawley	2012	BJSW	'Revisiting Barra': Changes in the structure and delivery of social work services in the Outer Hebrides - are rural tenets still alive?	Examines the ways in which social work services are organised and delivered in the Western Isles (Barra and Vatersay). Involved interviews and group discussions with range of informants. Includes some discussion of the delivery of MH services through multi-agency working and partnerships.
24	Beel	2014	Report	Exploring value in digital archives and the Comainn Eachdraidh (CE)	Examines how cultural work conducted by communities brings value to individuals and communities. Examines the everyday work of the Comainn Eachdraidh (CE) volunteers in the Western Isles. Suggests that the process of volunteering and shared experience of participating, collecting and listening with others, of producing something of worth for the community and its ability to bring people together, 'contributed to a sense of wellbeing and cohesiveness'. Refers to different types of bridging and bonding social capital being built in the process.
24	Beel	2020	Social & Cultural Geog	Gathering together: Social capital, cultural capital and the value of cultural heritage in a digital age	Examines how cultural capital is generated through community social relationships and day-to-day participation. Considers how the process of 'gathering' of cultural artefacts, both physically and digitally, creates cultural value. Suggests that the process itself, the shared experience of participating, collecting and listening with others; the sense of producing something of worth for the community and its ability to bring people together, contributed to a sense of WB and cohesiveness.

Synopsis					
ID	1st author	Year	Source	Article / report title	Synopsis
24	Wallace	2021	Chapter	How cultural heritage can contribute to community development and wellbeing	Examines how cultural heritage has helped to create resilient rural communities in 2 communities in Scotland - Portsoy (near Aberdeen) and the Isle of Lewis (Western Isles). Analyses the influence of factors such as local ownership and control of heritage on the WB of the communities. Finds that 'In the Outer Hebrides, the shared experience of participating, collecting and listening with others; the sense of producing something of worth for the community and its ability to bring people together, contributed to a sense of wellbeing and cohesiveness' (p.145). Considers the challenges of community-based research into WB and how best to theorise QoL in different community settings. Suggests that WB is a property of communities rather than only of individuals.
28	Carolan	2016	Eur J Cancer Care	General practitioners' 'lived experience' of assessing psychological distress in cancer patients: An exploratory qualitative study	Examines how GPs assess psychological distress in cancer patients. 7 GPs in the Western Isles were interviewed. Found 5 themes. Notes under limitations that rural GPs may have a greater role in distress assessment compared to urban GPs because of the lack of a local dedicated psycho-oncology centre; and lack of patient contact while they undergo radiotherapy treatment may reflect distances in this context.
29	Smith	2016	Pri Health Care Res & Dev	The impact of a support centre for people with sensory impairment living in rural Scotland	Evaluation of whether attendance at a Sensory Support Centre for people with a sensory impairment living in the Western Isles (WI) had an impact on their lives. Includes relevant content on social isolation of people with sensory impairment, and possible factors in their reluctance to seek help or access services. Found that 'As a direct result of contact and subsequent assessment provided through the WISC, some clients were able to identify a range of ways in which the interventions had reduced their sense of social isolation, impacted positively on self-confidence and sense of self-esteem and safety..' (p. 146)
31	Beel	2017	J Rural Studies	Cultural resilience: The production of rural community heritage, digital archives and the role of volunteers	Examines cultural heritage as a means of building more resilient communities (p.459) through 2 case studies of historical societies in Portsoy (near Aberdeen) and Lewis (Western Isles) using digital technologies. Does not mention MH or WB directly but does talk about concept of resilience and how this is created via cultural heritage activities.

ID	1st author	Year	Source	Article / report title	Synopsis
33	Support in Mind Scotland	2018	Report	Well Connected Communities: A study on community approach to mental health and well-being in five rural regions of Scotland	<p>Survey on experiences of rural MH, intended to improve understanding of how individuals and organisations can support and strengthen communities to improve mental WB. 378 respondents from 5 rural areas, including the Western Isles.</p> <p>Found people wanted low-level, non-clinical support in their local area; the most important thing to change was getting support when it was needed and tackling stigma. Found awareness of MH needed to be raised; that services for MH were being reduced and waiting time extending. Isolation was also an issue for those who received treatment on the mainland. Found that MH issues not treated as seriously as physical issues.</p> <p>Recommendations are made for action at national, regional and local levels.</p> <p>Concludes by saying that 'it is clear that good health is created first and foremost outside the walls of care facilities and that everyone has a contribution to make towards creating healthy places' (p.20)</p> <p>There were no significant differences in the findings across the 5 pilot areas.</p>
33	Support in Mind Scotland	2020	Report	Highlands and Islands Connections: Caring, connected communities - Putting the community at the centre of mental wellbeing	<p>Evaluation of a 12m project tackling MH & WB in Western Isles (Uists and Benbecula) and Mull in Argyll & Bute, examining how community connections can make a difference to MH & WB. The focus is on the whole community, not just those experiencing mental ill health, helping people to avoid mental ill health, rather than set up a MH service.</p> <p>65 individuals and 8 businesses & organisations took part on Mull. 271 individuals took part in a survey in the Uists & Benbecula.</p> <p>Found that rural communities are capable of developing more caring, connected communities; Support in Mind Scotland helps link people and groups to create solutions to local challenges; community-based activities improve mental WB but having a skilled and confident network of people will ensure support when it's needed most; communities at centre of mental WB are critical to a sustainable approach.</p> <p>Recommends priority given to communities to further enhance their own mental WB; systematic evidence to be built around how and why a community and place-based approach to mental WB is proving to be successful; evaluation approaches to assess outcomes from intervention, taking into account lived experiences; robust policy guidelines must be developed that recognise and support mentally-healthy places and communities; investment to be prioritised for initiatives that can be scaled-up and rolled out across Scotland; investment linked in to National Rural /MH Forum's work; an evidence-base must be built as to how communities of place have enhanced mental WB even under the Covid-19 conditions of 2020.</p>

ID	1st author	Year	Source	Article / report title	Synopsis
35	Bowes	2018	Dementia	RemoDem: Delivering support for people with dementia in remote areas	<p>Evaluation of potential technological solutions to providing care and services for people with dementia in remote areas in 6 test sites in 4 northern countries, including Scotland (Shetland and Western Isles).</p> <p>There were some common issues across sites e.g. stigma leading to shame and some social isolation.</p> <p>The technologies helped with communications in the sites sites, not only for service users and cares, but for staff working in remote areas too.</p> <p>The project highlighted the complexity of local circumstances in remote and rural areas in relation to dementia care. Whilst the sites each exhibited some of the challenges reported in the literature, these differed in their expression between contexts.</p> <p>Suggests there are benefits of taking a cross-contextual approach which enabled local differences and common challenges to emerge.</p>
37	Sherriff	2019	Interim report	Fuel poverty in the Western Isles: 10 lessons: Interim report of the Moving Together project	<p>Interim findings of an evaluation of a social prescribing project ('Moving Together') to improve heating of homes on Lewis (Western Isles), in an area served by the Langabhat Medical Practice.</p> <p>19 interviews with householders (referred to the project via GP, WI Association for MH, The Shed, & WI Foyer) and various stakeholders.</p> <p>Includes a few findings re MH & WB.</p>
37	Sherriff	2020	Report	Reshaping health services and fuel poverty in the Outer Hebrides: Final report of the Gluasad Còmhla (Moving Together) project	<p>Evaluation of a social prescribing project ('Moving Together') tackling ill-health by social prescribing - a process of making available non-medicalised support to improve health and WB, which can include energy advice and assistance with improvements to the home to address fuel poverty. The Western Isles Association for MH was a project partner.</p> <p>Found the project contributed to improvements in WB in myriad ways. It leveraged the traditional community assets of the Outer Hebrides, such as strong social networks and trusted connections in widening the referral pathway. Self-referral was valuable in creating access to the scheme for some but suggests it is important to be mindful of the exclusionary potential of over-relying on this approach.</p>
38	Cunningham	2019	Thesis (St Andrews)	Adaptation to the impacts of climate change in small island communities: An analysis of Scottish case studies	<p>Examines the adaptation of small island communities (Orkney, Shetland, Western Isles) to the impacts of climate change, including on health and WB.</p> <p>Considers community safety, WB, emotional stress, and other harms. Found that safety and WB were more of an issue on Unst & South Uist compared to Westray community. In South Uist a storm of 2005 had impacted the community (5 residents died in the South Ford causeway area); this experience influenced perception of safety & WB.</p>

Synopsis					
ID	1st author	Year	Source	Article / report title	Synopsis
40	Terje	2019	Interim report	T3.4.1 Mid-term evaluation report	<p>Interim findings from an evaluation of a programme delivering social prescribing and eHealth interventions within deployment sites in Scotland, Northern Ireland and Ireland ('mPower Programme').</p> <p>Reports interim findings by geographical areas, including NHS Western Isles and NHS Ayrshire & Arran, although the latter are not broken down by islands.</p> <p>Findings for the Western Isles included it having the third highest number of digital health interventions (41) and WB plans (84) within the programme; isolation was a key issue; there was a level of trust between patients and staff to share clinical info and a willingness to use Information Communication Technologies, and a culture of embracing new technology.</p> <p>Staff referred to challenges in terms of mPower fitting into pre-existing eHealth services without disrupting those that were already effective. Local staff acknowledged that there was a vibrant community and multiple groups in operation, and it was challenging for them to keep up with the ever-changing community landscape. Yet there were other areas where there was a lack of activities and transport was a challenge.</p>
49	Macaulay	2019	Thesis (Glasgow Caledonian)	The role of community landownership in improving rural health in Scotland	<p>Examines the connections between community landownership and rural health, using the case study of South Uist (Western Isles).</p> <p>Two pathways were identified through which community landownership affects health: land governance and land use.</p> <p>Suggests that community ownership of land bestows control, capital and confidence upon rural communities, allowing them to access their right to self-determination. It imbues a heightened spiritual connection to the land, which is claimed can improve mental health. Those involved in the management and governance of the estate can benefit from increased feelings of empowerment and responsibility over their lives and the lives of others. However, they are also considered more likely to suffer detrimental health effects through stress and criticism.</p>

Synopsis				
ID	1st author	Year	Source	Article / report title
41	Wherton	2020	Report	Evaluation of the Attend Anywhere / Near Me video consulting service in Scotland, 2019-20
				<p>Evaluation of Attend Anywhere (AA) / Near Me video consulting system in Scotland. Involved 140 interviews with a sample of stakeholders from urban, rural, and island areas (Skye, Orkney, Western Isles).</p> <p>Results are not broken down specifically by island grouping but findings re 'islands' in sample are scattered throughout report (participants quotes are labelled with e.g. 'GP, remote island practice').</p> <p>Across all Health Boards, psychiatry and psychology related services had highest uptake rate. Considers contextual issues influencing AA in Scotland, referring to alignment with 2019 National Islands Plan to improve QoL of island communities; it also refers to connectivity and digital literacy, noting there is high quality broadband in Western Isles but not yet a culture or using it. Also refers to mPower programme exploring links with AA.</p> <p>Recommends video consulting for counselling and similar services but not in cases of serious anxieties re using the tech (unless others on hand to help).</p> <p>Includes Table showing number of video consultations by Health Board for 2019.</p>
41	Wherton	2021	Report	Evaluation of the Near Me video consulting service in Scotland during COVID-19, 2020
				<p>Evaluation of Attend Anywhere (AA) / Near Me video consulting system in context of COVID-19 pandemic, when the service was rapidly scaled up across a range of settings (primary care, outpatients, inpatients, care homes).</p> <p>Involved interviews with 83 stakeholders (36 of whom were in previous study of AA), from 8 of 14 HBs - a mix of urban, rural and islands (Orkney, Western Isles).</p> <p>The report includes sections by areas, including for Western Isles and Orkney. The former refers to supporting use of video consulting for CAMHS and other services.</p> <p>Suggests need to consider staff wellbeing, MH, supervision, and training as workforce issues for users of the system because of greater cognitive load on staff and loss of personal care for patients.</p>
43	Kronsted Lund	2020	Annals Leisure Research	The vitalizing sea: Embodiment and wellbeing on a sea-kayak journey
				<p>Examines 6 students' experiences of sea-kayaking in Outer Hebrides, using Antonovsky's concept of salutogenesis. The analysis focuses on three main themes, one of which is 'the seascape, wellbeing and vitality'. Suggests that sea-kayaking involves dynamic encounters which influence experience and WB. Describes various aspects of the sensory experience e.g. contrast and variety of waves, movement, vitalising qualities of environment, sense of openness and freedom, soundscapes of waves and birds and seals. Suggests the partial immersion with the sea connects emotional/affective states, sensory/bodily experiences, the self and surroundings profoundly. These dynamics are varied and contrasting, and have different influences on the sea-kayakers emerging states of WB. Suggests that vitality dynamics, immersion and embodiment have implications for wellbeing, and may provide a theoretical contribution in future outdoor research concerned with salutogenesis or holistic WB.</p>

ID	1st author	Year	Source	Article / report title	Synopsis
36	Macaulay	2021	HEX	Public health perspectives on health improvement within a remote-rural island community	Examines public perspectives on health improvement in the Western Isles (Benbecula, Eriskay, South Uist). 62 individuals participated in the study. Explored various priorities using Q methodology, including a specific question on 'Reduce social isolation & loneliness by building relationships with people' (p.1294), and others on wider health and WB topics. 4 factors were identified, including 2 affecting social isolation, MH and WB. Considers various non-medical solutions to addressing social isolation, as well as medical and non-medical solutions to health improvement and WB.
45	Fixsen	2021	SAGE Open Medicine	Weathering the storm: A qualitative study of social prescribing in urban and rural Scotland during the COVID-19 pandemic	Examined 23 professionals' experiences of social prescribing schemes in urban (Glasgow) and rural areas (Western Isles, mPower programme) of Scotland during the first year of the pandemic. Found the schemes played an important role in combatting loneliness and isolation, with social prescribers connecting people to online befrienders and other services.
45	Fixsen	2022	QHR	Supporting vulnerable populations during the pandemic: Stakeholders' experiences and perceptions of social prescribing during Covid-19	Examines how 3 social prescribing schemes in Glasgow (2 schemes) and Western Isles (Community Navigators, mPower) have responded and adapted to the conditions of COVID-19 pandemic. Interviews with 23 stakeholders. Found the stakeholders in the Community Navigator scheme emphasised the use of personalised WB plans and digital health interventions to help connect people and combat social isolation and loneliness.
46	Glass	2021	Report	Covid-19, lockdowns and financial hardship in rural areas: Insights from the Rural Lives project	An output from The Rural Lives project, investigating financial hardship and vulnerability in 3 rural areas, one of which was Harris in the Western Isles. This report examines the impacts of the COVID-19 pandemic and lockdowns on individuals, and the responses to those impacts, via interviews and focus groups. It does not refer directly to MH or WB but does discuss changes on community cohesion and support linked to the COVID-19 pandemic. In Harris, it was felt that the situation had been transformational and brought greater community cohesion and support. e.g. "Whilst there was always that culture there of neighbours helping each other out, I think sometimes that's assumed of the Western Isles and it's not actually always real. I think we've had lots of people moving around. People don't mix in the same way that they did twenty years ago. [...] we have groups where people know everyone in their street now and they didn't know people at all beforehand. [...] it's been the most transformational thing [...] for probably the last hundred years." (Harris, focus group)' (p.16)

Synopsis				
ID	1st author	Year	Source	Article / report title
47	Children's Parliament	2021	Report	"Ask us how we are": Children's Parliament investigates mental health and wellbeing.
48	Currie	2021	Report	Understanding the response to Covid-19: Exploring options for a resilient social and economic recovery in Scotland's rural and island communities - summary report
<p>A Children's Parliament investigation, examining children's views, ideas and experiences on MH, WB and children's human rights. Involved 140 children in exploratory workshops at schools and nurseries in the Western Isles in 2021.</p> <p>It created a working definition of MH and identified the things that help and things that get in the way of children feeling happy, healthy and safe at home, at school, and in community. It discusses 3 key themes: trusting relationships, support when needed, playing. It ends with Calls to Action.</p> <p>Examines the lived experiences of the COVID-19 pandemic in rural and island communities in Scotland, the factors that promote resilience in these communities; and the routes to a medium to long-term recovery process. In Phase 1, 26 stakeholders were interviewed and analysed to generate a small area-level index of resilience to the impacts of the pandemic. The index was calculated from 9 specific indicators and mapped. In Phases 2 and 3, 2 case study areas were selected as contrasting case studies for comparison: Fife and the Western Isles.</p> <p>In Phase 1, found concerns about visitor numbers and potential for in-bound transmission of the virus, as well as issues with access to testing and supply chains being disrupted. The loss of community services and face-to-face engagement was widely felt in all case studies, with knock-on impacts in terms of isolation and WB, with less access to MH services than before the pandemic. Suggests that geographical peripherality is not the over-riding factor in relation to isolation and loneliness effects, although there were concerns in South Uist re vulnerability and a sense of being cut off. Poor digital connections also resulted in social isolation from friends and family. In Phase 2, found variation in the index mapping within and across areas. Some high scores (high resilience) were found in parts of Shetland, Orkney and the Western Isles. Suggests that there must be more local intelligence-gathering about local needs and that nuances across rural and island communities must be more carefully considered by future government policy, with priority given to place-based policy making. Claims the island case studies show that policy responses are required which reflect the specificity of different regions (e.g. 'island proofing' through Island Communities Impact Assessments introduced as part of the Islands (Scotland) Act 2018) and their unique socio-economic characteristics (e.g. peripherality) and which consider the impacts of wider national level policy on island regions.</p>				

ID	1st author	Year	Source	Article / report title	Synopsis
50	MacMillan	2021	Report	Evaluation of the Creative Communities Programme: Phase One	<p>Evaluation of 25 projects part of the Inspiring Scotland's Creative Communities programme, which supports and empowers communities to develop cultural activities. 20 projects tackled isolation and community connections; 18 aimed to have an impact on WB, most commonly MH. Within the programme there is an emphasis on 'Empowerment and place' - recognising each community's own local cultures and sense of place and identity; 'Wellbeing' - supporting mental wellbeing and reducing loneliness; and 'Diversion' - from anti-social behaviour and opportunities for young people at risk of reoffending.</p> <p>20 interviews with project staff and 4 with other stakeholders.</p> <p>Describes 3 projects in the programme set in the Western Isles, Isle of Gigha (part of Argyll & Bute), and Isle of Skye but the results are generalised and do not differentiate islands or between areas.</p> <p>The overall findings refer to the programme's impact on WB. It found 787 participants improved their mental WB through the projects. The activities helped people: to feel happy; to have something to look forward to; to feel part of something; to connect and interact with others. Suggests that taking part in shared creative activity made people feel better, at a time when, because of the pandemic, they often felt vulnerable, anxious and alone.</p>

4.6 Isle of Skye and The Small Isles

There were 19 works covering the Isle of Skye and The Small Isles, linked to just five studies. These comprised five journal articles, one book chapter, and 13 reports, published between 2002 and 2021 (see Table 7).

This set of works included a major study entitled 'Social geographies of rural mental health' funded by Economic and Social Research Council (study ID 9). It was set in the Scottish Highlands, with fieldwork being conducted on the Isle of Skye and three other areas. The study generated a number of outputs, 15 of which were included in the review (four journal articles, one book chapter, 10 reports). These works examined many different aspects of rural mental health, including the perspectives of mental health service users, their carers, and service providers; social differences in the rural communities; spatial variations in service provision and support networks; and experiences of inclusion/exclusion, resilience, of using drop-in centres, and rural idylls/hells. The series of reports from the study include an introductory edition that briefly lays out the findings per report (Philo, Parr, and Burns, 2002a) and a final summary report of the overall findings (Philo, Parr, and Burns, 2003).



*Isle of Skye & surrounding islands: Scalpay, Raasay
The Small Isles: Eigg, Muck, Rum, Canna, & Sanday*

The topics covered in other works were telehealth, dementia, and communities.

Selected findings - the Isle of Skye and The Small Isles

- The 'Social geographies of rural mental health' study identified commonalities and differences in mental health service users' experiences, including issues with access to mental health services and support networks for people with particular mental health conditions; confidentiality; fitting in to communities; being watched and judged; and repression of emotions.
- A study of a new model of health care delivery being piloted in some of the areas served by NHS Highland (the 'Being Here' project) included service users and providers in The Small Isles as well as other parts of NHS Highland (Munoz, Bradley, and Bailey, 2019). It identified concerns about access to mental health services in all pilot areas, especially where users lived a long way from service centres and support groups, and about the confidentiality of counselling when delivered to residents living in small communities.

Table 7: Isle of Skye and The Small Isles - mental health (MH) and wellbeing (WB) works

ID	1st author	Year	Source	Article / report title	Synopsis
9	Philo	2002	Report	Introducing the findings papers #1	A report from the ESRC Social Geographies of Rural MH project. This paper contains a summary of the findings of each of the 14 papers in the series and information on the qualitative and ethnographic methods used: interviews with 107 service users (26 in Skye and Lochalsh). Sample included 69 incomers and 38 locals. Included 52 depression, 14 manic depression, 9 schizophrenia, 21 other, 11 unknown. Included 51 male, 56 female. Included 19 <30, 84 middle-aged, and 4 aged 65+.
9	Philo	2002	Report	Highlands, Economy, Culture and Mental Health Problems #4	A report from the ESRC Social Geographies of Rural MH project. Examines users' perceptions of the Highlands landscapes, cultural norms and (not) fitting in, resilience, and repression of emotions.
9	Philo	2002	Report	Remoteness, rurality and mental health problems #5	A report from the ESRC Social Geographies of Rural MH project. Discusses perceptions of remote locations, isolation and loneliness. Includes sub-sections on physical and infrastructure remoteness; social and cultural isolation; and mental health implications. It also discusses rural lifestyles, urban contrasts, idylls and hells. Includes lots of quotes, including ones (marked up) from service users living in Skye.
9	Philo	2002	Report	Social differences: Locals, incomers, gender, age and ethnicity #8	A report from the ESRC Social Geographies of Rural MH project. Examines social differences in terms of locals vs incomers, and by gender, age and ethnicity. Finds that living in close knit communities can be helpful but also give rise to problems for people with MH issues. This applies to both incomers and perhaps more so to locals as they are the most attuned to its norms and expectations and fears about being ostracised.
9	Philo	2002	Report	Spatial differences: East and west, Inverness and the rest #9	A report from the ESRC Social Geographies of Rural MH project. Examines the spatial provision of MH services across the Highlands. Finds an uneven east-west distinction, and an Inverness axis, in the statutory, voluntary and user-led services, with Skye and NW Sutherland being least well served. Suggests that these variations are apparent in users' experiences, in community understandings and attitudes to MH, and in the characteristics of the MH problems found across the 4 case studies.
9	Burns	2002	Report	Formal services #13	A report from the ESRC Social Geographies of Rural MH project. Examines variation in MH services across 4 Highland case studies. Found that users perceived an east-west divide in MH provision, with the east (nearer Inverness) being better served than the west (Skye and Lochalsh) and NW Scotland (Sutherland).

					Synopsis	
ID	1st author	Year	Source	Article / report title		
9	Burns	2002	Report	Drop-ins #14	<p>A report from the ESRC Social Geographies of Rural MH project. Examines three drop-in centres in 3 case study areas, including one run by the Skye and Lochalsh Mental Health Association: 'The Cabin', in Portree, Skye. The drop-in centres all provided an informal setting for people experiencing isolation due to mental health problems. The Cabin is also used for various hobbies and activities, as a used furniture business, and it provides cheap food for users.</p> <p>Discussion of The Cabin was prominent in users accounts of everyday life on Skye. Users referred to the importance of confidentiality and to negative attitudes in community towards The Cabin and it's outreach centre; some users questioned who The Cabin was for and issues with disruptive behaviour of some individuals. Found the drop-in centres became medical spaces when the psychiatrist visited.</p>	
9	Burns	2002	Report	User networks #15	<p>A report from the ESRC Social Geographies of Rural MH project. Examines formal and informal user networks for MH service users in the case study areas. Includes discussion of the role of Skye and Lochalsh Users Group (SLUG) and issues accessing other diagnosis-specific groups outside of Inverness area.</p>	
9	Burns	2003	Report	The place of Highland General Practitioners in the provision of mental health services #16	<p>A report from the ESRC Social Geographies of Rural MH project. Examines GP perspectives on rural MH care. The postal survey results are broken down by a different geography; Skye is included within Wester Ross. But several quotes still labelled with interview codes for Skye & Lochalsh.</p>	
9	Philo	2003	Report	Social geographies of rural mental health: Summary report	<p>A summary report of the ESRC Social Geographies of Rural MH project. This is the Executive Summary and Summary Report of the study. Findings are summarised by perspective: service users (on each of the 14 topics covered), service providers, and informal carers. The summary report provides more of an overview of findings and contains less data on the 4 case study areas. It is broken down more by perspectives than by localities.</p>	
9	Parr	2003	Social & Cultural Geog	Rural mental health and social geographies of caring	<p>An article from the ESRC Social Geographies of Rural MH project. Examines the social geographies of formal and informal care, and critiques the notion of community care. The analysis draws mainly on the more remote case studies on the west coast (Skye and NW Sutherland).</p>	
9	Parr	2004	Trans Inst Br Geog	Social geographies of rural mental health: Experiencing inclusions and exclusions	<p>An article from the ESRC Social Geographies of Rural MH project. Examines exclusionary and inclusionary practices and social relations concerning people with MH problems living in the Highlands. Includes discussion of the tensions associated with being observed and not showing emotions or distress in rural communities.</p>	

ID	1st author	Year	Source	Article / report title	Synopsis
9	Philo	2004	Scottish Geog Journal	'They shut them out the road': Migration, mental health and the Scottish Highlands	An article from the ESRC Social Geographies of Rural MH project. Examines the experiences of people with MH problems who have migrated into the Highlands (so-called 'incomers'). Includes several quotes attributable to service users from Skye.
9	Parr	2006	Chapter	'Not a display of emotions': Emotional geographies in the Scottish Highlands	A chapter from the ESRC Social Geographies of Rural MH project. Examines the emotional geographies of people with MH problems living in the Scottish Highlands. The discussion is more general re the Highlands and the case studies are less differentiated in this work compared to others from the same study.
9	Philo	2017	J Rural Studies	The rural panopticon	An article from the ESRC Social Geographies of Rural MH project. Discusses service users' experiences of being watched, discussed, and judged, in the context of Foucault's work on the panopticon. The paper includes several quotes attributable to service users from Skye.
15	Blackstock	2006	J Rural Studies	Living with dementia in rural and remote Scotland: Diverse experiences of people with dementia and their carers	Examines the experiences of people living with dementia and their carers in rural and remote Scotland. 15 service users and 30 carers were recruited from 8 rural areas of Scotland, including the Western Isles, Highlands, Argyll & Bute. Of these, 17 (5 service users and 12 carers) were listed as 'island' participants (but unclear which - except for one reference to a participant on Skye). Some findings are attributable to island-dwelling participants. Found dementia can be hidden in close knit communities, particularly Island and Gaelic communities, where they note a tradition of self-sufficiency and of closing ranks to help someone. There is further reference to both stigma and self-sufficiency as factors preventing service users and carers from accessing services, particularly among bilingual or island-based participants.
39	Munoz	2019	Report	Final evaluation report of the Being Here Programme: Stakeholder experiences of changes to remote and rural healthcare services	Evaluation of a new health service delivery model pilot ('Being Here' project). Over 200 interviews were conducted with stakeholders in several islands in The Small Isles and off the Argyll coast (Islay, Canna, Rum, Eigg, Muck), examining service change within and outwith the pilot project. Found concerns were expressed about access to MH services in all pilot areas, particularly where patients lived a long distance from dedicated services and support groups. Delivering counselling was identified as a particular problem in small communities because of the difficulty of ensuring confidentiality. Suggests primary care and online resources could potentially have a greater role where patients cannot regularly access any other mainstream services such as Community Psychiatric Nurses or support groups.

ID	1st author	Year	Source	Article / report title	Synopsis
41	Wherton	2020	Report	Evaluation of the Attend Anywhere / Near Me video consulting service in Scotland, 2019-20	<p>Evaluation of Attend Anywhere (AA) / Near Me video consulting system in Scotland. Involved 140 interviews with a sample of stakeholders from urban, rural, and island areas (Skye, Orkney, Western Isles).</p> <p>Results are not broken down specifically by island grouping but findings re 'islands' in sample are scattered throughout report (participants quotes are labelled with e.g. 'GP, remote island practice').</p> <p>Across all Health Boards, psychiatry and psychology related services had highest uptake rate. Considers contextual issues influencing AA in Scotland, referring to alignment with 2019 National Islands Plan to improve QoL of island communities; it also refers to connectivity and digital literacy, noting there is high quality broadband in Western Isles but not yet a culture or using it. Also refers to mPower exploring links with AA.</p> <p>Recommends video consulting for counselling and similar services but not in cases of serious anxieties re using the tech (unless others on hand to help).</p> <p>Includes Table showing number of video consultations by Health Board for 2019.</p>
50	MacMillan	2021	Report	Evaluation of the Creative Communities Programme: Phase One	<p>Evaluation of 25 projects part of the Inspiring Scotland's Creative Communities programme, which supports and empowers communities to develop cultural activities. 20 projects tackled isolation and community connections; 18 aimed to have an impact on WB, most commonly MH. Within the programme there is an emphasis on 'Empowerment and place' - recognising each community's own local cultures and sense of place and identity; 'Wellbeing' - supporting mental wellbeing and reducing loneliness; and 'Diversion' - from anti-social behaviour and opportunities for young people at risk of reoffending.</p> <p>20 interviews with project staff and 4 with other stakeholders.</p> <p>Describes 3 projects in the programme set in the Western Isles, Isle of Gigha (part of Argyll & Bute), and Isle of Skye but the results are generalised and do not differentiate islands or between areas.</p> <p>The overall findings refer to the programme's impact on WB. It found 787 participants improved their mental WB through the projects. The activities helped people: to feel happy; to have something to look forward to; to feel part of something; to connect and interact with others. Suggests that taking part in shared creative activity made people feel better, at a time when, because of the pandemic, they often felt vulnerable, anxious and alone.</p>

4.7 Islands off the Argyll coast

Just four works were found for the islands off the Argyll coast. One of these was a journal article and four were reports, published between 2005 and 2021 (see Table 8).

Two of the works examined communities (MacMillan, 2021; Support in Mind Scotland, 2020), and the others looked at service change (Munoz, Bradley and Hinds, 2019) and dementia care (Fisher and Moriarty, 2005).



Argyll & Bute coast. Including: Bute, Islay, Mull, Tiree, Seil, Luing, Jura, Coll, Lismore, Iona, Gigha, Colonsay, Eilean Loain, Easdale, Kerrera

Selected findings - islands off the Argyll coast

- One older work described the establishment of a dementia service (Thomson Court) on Bute and its interface with the local community (Fisher and Moriarty, 2005).
- The other more recent works (MacMillan, 2021; Munoz, Bradley, and Hines, 2019; Support in Mind Scotland, 2020) included participants from one or more of the islands in this grouping, as part of wider studies involving other communities. The islands included Islay, Canna, Rum, Eigg, Muck, Mull, and Isle of Gigha.
- One of these works examined how rural communities can make a difference to mental health and wellbeing, and included 65 individuals and 8 businesses and organisations on Mull, as well as the Western Isles (Support in Mind Scotland, 2020). It found rural communities can develop more caring and connected communities, and recommended community-led and place-based approaches to promote mental wellbeing.

Table 8: Islands off the Argyll coast - mental health (MH) and wellbeing (WB) works

ID	1st author	Year	Source	Article / report title	Synopsis
13	Fisher	2005	Dementia	Thomson Court: Integrating long-term care and community care in a rural community	Published in the 'Innovative practice' section of the journal. Describes the Thomson Court dementia project, which started in 1993 when a former residential home was converted to provide an integrated dementia service to the people of Bute. Notes that an important aim of the project was to raise awareness of dementia and reduce its stigma within the local community.
39	Munoz	2019	Report	Final evaluation report of the Being Here Programme: Stakeholder experiences of changes to remote and rural healthcare services	Evaluation of a new health service delivery model pilot ('Being Here' project). Over 200 interviews were conducted with stakeholders in several islands in The Small Isles and off the Argyll coast (Islay, Canna, Rum, Eigg, Muck), examining service change within and outwith the pilot project. Found concerns were expressed about access to MH services in all pilot areas, particularly where patients lived a long distance from dedicated services and support groups. Delivering counselling was identified as a particular problem in small communities because of the difficulty of ensuring confidentiality. Suggests primary care and online resources could potentially have a greater role where patients cannot regularly access any other mainstream services such as Community Psychiatric Nurses or support groups.

ID	1st author	Year	Source	Article / report title	Synopsis
33	Support in Mind Scotland	2020	Report	Highlands and Islands Connections: Caring, connected communities - Putting the community at the centre of mental wellbeing	<p>Evaluation of a 12m project tackling MH & WB in Western Isles (Uists and Benbecula) and Mull in Argyll & Bute, examining how community connections can make a difference to MH and WB. The focus is on the whole community, not just those experiencing mental ill health, helping people to avoid mental ill health, rather than set up a MH service.</p> <p>65 individuals and 8 businesses & organisations took part on Mull. 271 individuals took part in a survey in the Uists & Benbecula.</p> <p>Found that rural communities are capable of developing more caring, connected communities; Support In Mind Scotland helps link people and groups to create solutions to local challenges; community-based activities improve mental WB but having a skilled and confident network of people will ensure support when it's needed most; communities at centre of mental WB are critical to a sustainable approach.</p> <p>Recommends priority given to communities to further enhance their own mental WB; systematic evidence to be built around how and why a community and place-based approach to mental WB is proving to be successful; evaluation approaches to assess outcomes from intervention, taking into account lived experiences; robust policy guidelines must be developed that recognise and support mentally-healthy places and communities; investment to be prioritised for initiatives that can be scaled-up and rolled out across Scotland; investment linked in to National Rural MH Forum's work; an evidence-base must be built as to how communities of place have enhanced mental WB even under the Covid-19 conditions of 2020.</p>

ID	1st author	Year	Source	Article / report title	Synopsis
50	MacMillan	2021	Report	Evaluation of the Creative Communities Programme: Phase One	<p>Evaluation of 25 projects part of the Inspiring Scotland's Creative Communities programme, which supports and empowers communities to develop cultural activities. 20 projects tackled isolation and community connections; 18 aimed to have an impact on WB, most commonly MH. Within the programme there is an emphasis on 'Empowerment and place' - recognising each community's own local cultures and sense of place and identity; 'Wellbeing' - supporting mental wellbeing and reducing loneliness; and 'Diversion' - from anti-social behaviour and opportunities for young people at risk of reoffending.</p> <p>20 interviews with project staff and 4 with other stakeholders.</p> <p>Describes 3 projects in the programme set in the Western Isles, Isle of Gigha (part of Argyll & Bute), and Isle of Skye but the results are generalised and do not differentiate islands or between areas.</p> <p>The overall findings refer to the programme's impact on WB. It found 787 participants improved their mental WB through the projects. The activities helped people: to feel happy; to have something to look forward to; to feel part of something; to connect and interact with others. Suggests that taking part in shared creative activity made people feel better, at a time when, because of the pandemic, they often felt vulnerable, anxious and alone.</p>

4.8 Islands off the North Ayrshire coast

Just two works were found relating to the islands off the North Ayrshire coast grouping. One was a journal article (Finlay, 2022), and the other an interim report (Terje, Munoz and Bailey, 2019), both published recently (see Table 9).

The journal article was on the topic of dementia and the report was on social prescribing.



*North Ayrshire coast.
Including: Arran, Great
Cumbrae*

Selected findings - islands off the North Ayrshire coast

- One study, set on the Isle of Arran, examined how a former archaeologist's experience of dementia was expressed through her tactile relationship with material objects, such as flint gravel imported from outside Scotland, the handling and sorting of which into simple assemblages of found materials was thought to have brought her comfort (Finlay, 2022).

Table 9: Islands off the North Ayrshire coast - mental health (MH) and wellbeing (WB) works

ID	1st author	Year	Source	Article / report title	Synopsis
40	Terje	2019	Interim report	T3.4.1 Mid-term evaluation report	<p>Interim findings from an evaluation of a programme delivering social prescribing and eHealth interventions within deployment sites in Scotland, Northern Ireland and Ireland ('mPower Programme').</p> <p>Reports interim findings by geographical areas, including NHS Western Isles and NHS Ayrshire & Arran, although the latter are not broken down by islands.</p> <p>Findings for the Western Isles included it having the third highest number of digital health interventions (41) and WB plans (84) within the programme; isolation was a key issue; there was a level of trust between patients and staff to share clinical info and a willingness to use Information Communication Technologies, and a culture of embracing new technology.</p> <p>Staff referred to challenges in terms of mPower fitting into pre-existing eHealth services without disrupting those that were already effective. Local staff acknowledged that there was a vibrant community and multiple groups in operation, and it was challenging for them to keep up with the ever-changing community landscape. Yet there were other areas where there was a lack of activities and transport was a challenge.</p>
53	Finlay	2022	Antiquity	An archaeology of dementia	<p>Describes a case study of archaeological analysis of a dementia assemblage, created by a resident of the Isle of Arran who had dementia and who had also been a carer of a relative with dementia.</p> <p>Examines the embodied and material traces of the resident's earlier archaeological practices, her increasing comfort in handling stone as dementia progressed and her sustained interest in the pareidolic properties of things. Suggests that the resident's archaeological collection work was creatively transformed through dementia. Claims that the results contribute to a wider understanding of the important role of materiality for those living with dementia.</p>

4.9 'Anonymous' Scottish islands

In three of the works, the island groupings were not named (Daly, 2014; Johnston et al, 2011; Roberts et al, 2015). Two were journal articles and one was a PhD thesis (see Table 10).

The thesis was the only example of a study involving an international comparison, in this case, with rural communities in Alberta, Canada.

This set of works were on the topics of eHealth/Information Communication Technologies for people with chronic pain, telehealth in palliative care settings, and a comparative study of rural mental health services.

Selected findings - the 'Anonymous' Scottish islands

- A PhD study comparing the experiences of mental health service users in rural areas of the Highlands of Scotland, including an unnamed island, and rural areas in Alberta, Canada, found that stigma was an issue in both countries, but was more pronounced in the Highlands (Daly, 2014).

Table 10: 'Anonymous' Scottish islands - mental health (MH) and wellbeing (WB) works

ID	1st author	Year	Source	Article / report title	Synopsis
19	Johnston	2011	Palliative Medicine	An evaluation of the use of Telehealth within palliative care settings across Scotland	<p>A scoping study mapping and assessing the use of telehealth applications within palliative care in Scotland.</p> <p>3 focus groups were held with patients, including one on a Scottish island, one rural and one urban, to capture a range of experiences. Interviews were conducted with stakeholders, 3 of whom were from the (unnamed) island site.</p> <p>In the analysis, quotes are labeled by stakeholder or focus group, not sites - so it's not possible to differentiate results by site - although some of the content is clearly attributable to the island site.</p>
25	Daly	2014	Thesis (UHI/ Aberdeen)	Mental health services and inclusion in remote and rural areas of Scotland and Canada	<p>Examines the experiences of rural MH service users and providers in 3 areas of the Highlands of Scotland and 3 areas of Alberta, Canada, and considers the contribution of MH voluntary organisations in helping to overcome the challenges of social exclusion for service users.</p> <p>Finds that MH stigma remains a considerable problem for rural service users in both countries but is more pronounced in Highland, and that the close-knit nature of rural communities is challenging for service users in relation to maintaining anonymity and forging friendships. Also finds a 'rhetoric-reality' gap in the policy on social inclusion and that voluntary organisations play an important role in users recovery. Analyses the relationship between MH and social capital, demonstrating how positive MH outcomes are achieved.</p> <p>Quotes are labelled for users by sites but providers are labelled by role and region, so it's not possible to link them to Site A (island).</p>
26	Roberts	2015	Int J Qual Studies on Health & WB	Striking a balance between in-person care and the use of eHealth to support the older rural population with chronic pain	<p>Evaluation of an eHealth project to enhance the life experiences of older people with chronic pain, who live in remote/rural areas.</p> <p>A case study on an unnamed island, involving observation and interviews with 6 patients aged 60-79 with chronic pain, 5 health and social care professionals, and observation of 6 home visits.</p> <p>It found variation in acceptability, in physical ability to use technology, and in access to the IT infrastructure necessary to use digital care options. Participants in the island focus group perceived the greatest need for telehealth to supplement the current system of care. Potential benefits included reduced travel cost and time, and avoiding the physical and emotional impacts of travelling when unwell, as well as access to an expanded network of support and out-of-hours support. Finds that the potential recipients of eHealth are open to the use of such technologies, that eHealth may provide opportunities to sustain and enhance these interactions, but that in-person care is likely to remain an important element of care in the future.</p>

5. General observations

5.1 Coverage

The Western Isles were represented in the largest proportion of the works and associated studies, of those identified. Surprisingly few studies included the Orkney Islands. The reasons for this spread are likely to be manifold and include factors such as: local Health Board and Local Authorities interest in and capacity for developing and evaluating local initiatives; the availability of funding for research and higher costs of conducting fieldwork in remote island settings; the small size of some of the groups of interest (e.g. residents with relatively rare mental health conditions and/or who are part of 'minority' groups; disciplinary trends (e.g. the decline of 'rural' sociology and the rise of 'health' geography sub-disciplines); and the difficulties identifying works linked to some of the island groupings.

It should be stressed, however, that the number of works and associated studies is only a crude gauge of the state of research activity on the Scottish islands. There is an important distinction between social research that is set on an island and research that is *about* an island. A closer look at the works identified reveals that only a portion were explicitly interested in the connections between island life and mental health and wellbeing. Those that explored these place-based connections showed that there were variations between and within different island communities (e.g. Wilson et al., 2021), and between islands and other types of places (e.g. Bowes et al., 2018; Philo, Parr, and Burns, 2002a, 2003). These patterns remain to be further investigated and explained.

A related point is that, while a portion of the studies included one or more island grouping as part of a wider geographical sample, they did not always routinely break down and analyse these data at this level. In several cases, this would have been appropriate and added to the evidential value of the research.

Various aspects of mental health and wellbeing have been investigated in the context of the Scottish islands. In the past 10 years, these have included evaluations of new developments in the provision of mental health care and in the promotion of mental wellbeing. For example, several works examined the use of telehealth and eHealth interventions as a way of improving access to specialist mental health services (and, in some cases, various other medical services) for people living in remote and island communities (e.g. Bowes, Dawson and MaCabe, 2018; Innes et al., 2012; Roberts et al., 2015; Vaitheswaran et al., 2018; Wherton and Greenhalgh, 2020, 2021). Other works examined the introduction of social prescribing initiatives designed to tackle issues such as social isolation and loneliness, and to prevent relatively minor issues escalating into major mental health episodes or chronic illness (e.g. Fixen, Barrett and Shimonovich, 2021, 2022; Sherriff et al., 2019, 2020; Terje, Munoz and Bailey, 2019). Yet others examined the ways in which participation in cultural and community-led projects can help to create connections and wellbeing within whole communities (e.g. Beel and Wallace, 2014, 2017, 2020; MacMillan, 2021; Support in Mind Scotland, 2018, 2020; Wallace and Beel, 2021) as well as for individuals (e.g. Finlay, 2022).

Surprisingly, only one study was found to have evaluated the ways in which taking part in activities in the natural environment of the Scottish islands can benefit body and mind (Kronsted Lund, Gurholt, and Dykes, 2020). This is a growing area of research in the UK and internationally, to which Scotland could potentially contribute more.

Other notable gaps in the literature included: a lack of recent work on the mental health and wellbeing of specific occupational groups (e.g. farmers, fishermen, care staff); models of service provision for relatively small numbers of residents with specialist needs (e.g. self-harm, eating disorders) including access to specialist staff and places of safety; and dedicated research on the impacts of the Covid-19 pandemic on the mental health and wellbeing of Scotland's island populations (including people with long-Covid).

5.2 Themes

While the evidence from the studies was not synthesised in this mapping review, the process of producing the brief synopses of the individual works revealed some recurrent themes in the literature. These included the following:

- Issues regarding access to specialist mental health services and support.
- The importance of belonging and feeling connected to communities.
- Concerns about stigma around mental health issues, which can act as a barrier to people seeking help.
- Concerns about confidentiality of counselling for mental health issues when living in small communities.
- Insights into the 'double-edged sword' of living in small communities where people know each other and can offer mutual support but which can also engender a sense of lack of privacy and feeling watched and judged, especially if one is not considered to fit in with traditional local norms and culture.
- The experience of minority stress or similar if one is not considered to be an accepted or equal member of a community.
- Concerns about alcohol consumption.
- Concerns about suicide rates in some islands.
- Concerns about digital inequalities and the balance between having remote and in-person treatment options to suit the preferences of different groups of residents.
- Interest in different forms of connections that sustain mental wellbeing - through in-person and digital interactions; through cultural and historical practices that are associated with an island identity; and through sensory experiences of being in the natural environment and of working with the hands.
- Interest in community-led and place-based approaches to mental health and wellbeing.

6. Suggested priorities for future research

This mapping review has shown that there is a general lack of research that is explicitly focussed on mental health and wellbeing in the Scottish islands. Based on the findings, ten priorities for future research are identified below.

1. The survey of adult residents in all Scottish islands (Wilson et al., 2021) is repeated periodically to provide longitudinal data for analysis over time, enabling examination of the impact of the Covid-19 pandemic on mental health and wellbeing, and also expanded to include children and young people. The baseline survey provides rare and important insights into the experiences of adult residents of many of the populated islands of Scotland. Its granularity also allows for comparisons between and within different island groupings. It would also be useful if the survey could be supplemented with interviews with a sub-sample of respondents to obtain more in-depth data on their experiences. These qualitative data could be archived and made available to the wider research community for secondary analysis alongside the statistical data. The response rate to future editions of the survey could be improved through funding for additional engagement work to promote the survey and the value of the place-based data it provides.
2. In-depth qualitative research with island residents and service providers, examining their experiences of and responses to mental health issues within and across different island communities, to identify the characteristics that are considered to make some communities supportive and resilient, and others less so. This could include examination of the availability, accessibility, acceptability and effectiveness of services provided for people with mental health issues, as well as the role of any social activities and local assets in a given community in helping to promote and sustain mental wellbeing for a wider range of people. This work could help to identify the ways in which the needs of different groups of people on different islands are being met (or not), and to identify practices that might fit other communities and be adopted or adapted by them.
3. The use of sampling frameworks that include island populations in wider studies of people with mental health conditions where possible, with data being analysed and reported by geographical sub-populations (providing this does not risk identifying individuals). This would enable studies of the nature, acceptability and effectiveness of services for people with particular conditions, such as schizophrenia, to be better represented in research, including their families.
4. Research investigating the factors involved in deaths by suicide in the Scottish islands, and measures to prevent them in this context.
5. Research on the mental health and wellbeing of care staff.
6. Research on models of service delivery for relatively small numbers of island residents with specialist needs, including access to specialist staff (e.g. eating disorders, self-harm) and places of safety.

7. Research investigating which configurations of in-person and remote mental health consultations works best, for whom, in what circumstances, for island residents - and how this can be facilitated in flexible and responsive services models of care. This research needs to consider the needs and preferences of various groups, including children and young people; older people; men; informal carers; different occupational groups (e.g. farmers, care workers), and minority groups (e.g. LGBT, migrants).
8. Research examining the social and place-based determinants of mental health and wellbeing in island populations. This includes examining the interplay and local impact of global, national, regional and local factors in a given place (e.g. climate change, Covid-19, cost of living, digital infrastructure, public transport infrastructure, local services and amenities, tourism, local natural assets) on the mental health and wellbeing of island residents, and what constitutes and contributes to community 'resilience' and 'cohesion' in response to adverse and disruptive events.
9. Research that builds on existing international research investigating the benefits of the natural environment and cultural activities for mental health and wellbeing, for example, by examining the effects of participating in associated activities in the Scottish islands for residents and for visitors.
10. Research investigating in more detail the nature of 'connected' communities, to establish empirically the ways in which they are created (and eroded) over time and how they relate to the experience of community mental health and wellbeing, as well as to apply existing or develop new theories explaining the observed variations, associations, and contradictions. A place-based approach would enhance understanding of the inter-play of different contributory factors in island communities, considering the uniqueness of given island populations, their relations with neighbouring islands and/or mainland communities, and arrangements with associated health and social care systems.

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Appendix A: Inclusion and exclusion criteria

	Included	Excluded
Sample	Residents of Scottish islands; care providers for residents of Scottish islands.	Lack of differentiation of sample or breakdown of results by island/s or attribution of findings to one or more island/s.
Phenomena of interest	Mental health; wellbeing (of individuals', of communities'); specific mental health conditions; social isolation and loneliness; service users and their carers; service providers; interventions; social prescribing; nature/natural assets.	
Positioning of phenomena	Central, marginal, or emergent interest.	Passing mentions; contextual information (e.g. references to research by others).
Design	Empirical (qualitative, quantitative, mixed methods); reviews; conceptual; methodological.	Data summaries (e.g. public health data); notes/records of public consultations (e.g. over National Islands Plan); records of visits (e.g. by Mental Welfare Commission for Scotland).
Type	Qualitative, quantitative, reviews, commentaries, editorials.	Personal reflections with no substantial information; semi-documentary/ biographical accounts.
Origin	Academic, government, Health Board, Local Authority, professional body, third sector, and other organisations.	
Output type	Publications, PhD theses, reports, annual reports.	MSc dissertations.
Language	English.	Non-English (there was insufficient time to conduct searches for literature in Gaelic).
Time span	No limit.	

Appendix B: Example search string (Medline)

#	Query	Results
S63	S56 OR S57 OR S58 OR S59 OR S60 OR S61	79
S62	S50 OR S51 OR S52 OR S53 OR S54 OR S55	31
S61	S9 AND S49	8
S60	S9 AND S48	0
S59	S9 AND S47	3
S58	S9 AND S43	4
S57	S9 AND S31	59
S56	S9 AND S14	16
S55	S3 AND S49	4
S54	S3 AND S48	0
S53	S3 AND S47	3
S52	S3 AND S43	2
S51	S3 AND S31	22
S50	S3 AND S14	6
S49	TI ((severe acute respiratory syndrome coronavirus 2 or Wuhan coronavirus* or 2019-nCoV or COVID*19 or coronavirus disease 2019 or SARS-CoV-2 or 2019 novel coronavirus infection* or coronavirus disease-19 or sars-covid 2019 or wuhan virus or 2019*nCoV or coronavirus disease 2019 or novel coronavirus)) OR AB ((severe acute respiratory syndrome coronavirus 2 or Wuhan coronavirus* or 2019-nCoV or COVID*19 or coronavirus disease 2019 or SARS-CoV-2 or 2019 novel coronavirus infection* or coronavirus disease-19 or sars-covid 2019 or wuhan virus or 2019*nCoV or coronavirus disease 2019 or novel coronavirus))	206,254
S48	TI (((blue OR green OR "Wilderness Experience" OR "nature-based") AND health intervent*) OR) OR AB (((blue OR green OR "Wilderness Experience" OR "nature-based") AND health intervent*) OR)	175
S47	S44 OR S45 OR S46	4
S46	TI (("northern islands" AND (Scotland OR Scottish))) OR AB (("northern islands" AND (Scotland OR Scottish)))	4
S45	TI (("small islands" AND (Scotland OR Scottish))) OR AB (("small islands" AND (Scotland OR Scottish)))	0
S44	TI "island*proof*" OR AB "island*proof*"	0
S43	S32 OR S33 OR S34 OR S35 OR S36 OR S37 OR S38 OR S39 OR S40 OR S41 OR S42	41,910
S42	TI (("Attend Anywhere" OR "Near Me")) OR AB (("Attend Anywhere" OR "Near Me"))	26
S41	TI "chatbot*" OR AB "chatbot*"	326
S40	TI telehealth OR AB telehealth	7,436

#	Query	Results
S39	TI "being here" OR AB "being here"	98
S38	TI "Men* shed*" OR AB "Men* shed*"	103
S37	TI (("Mental Health Organizations" OR "Mental Health Service*" OR "Mental Health Personnel") OR AB (("Mental Health Organizations" OR "Mental Health Service*" OR "Mental Health Personnel"))	22,459
S36	TI ((CAMHS OR "Child and adolescent mental health")) OR AB ((CAMHS OR "Child and adolescent mental health"))	1,640
S35	TI "social prescribing" OR AB "social prescribing"	218
S34	TI ((Health Care Delivery, Integrated" OR "integrated care")) OR AB ((Health Care Delivery, Integrated" OR "integrated care"))	1
S33	TI (("Community Mental Health Services" OR "Community Mental Health Nursing" OR "community care" OR "Community Psychiatric Nurse")) OR AB (("Community Mental Health Services" OR "Community Mental Health Nursing" OR "community care" OR "Community Psychiatric Nurse"))	5,909
S32	TI "Psychosocial Interventio*" OR AB "Psychosocial Interventio*"	6,090
S31	S15 OR S16 OR S17 OR S18 OR S19 OR S20 OR S21 OR S22 OR S23 OR S24 OR S25 OR S26 OR S27 OR S28 OR S29 OR S30	1,286,515
S30	TI Connectedness OR AB Connectedness	4,850
S29	TI Suicid* OR AB Suicid*	85,786
S28	TI "Eating disorder*" OR AB "Eating disorder*"	21,851
S27	TI (("Substance Dependence" OR "Alcoholism")) OR AB (("Substance Dependence" OR "Alcoholism"))	29,561
S26	TI Psycholog* OR AB Psycholog*	295,571
S25	TI Psychos* OR AB Psychos*	174,779
S24	TI Autis* OR AB Autis*	56,230
S23	TI ((Bipolar OR bi-polar)) OR AB ((Bipolar OR bi-polar))	67,865
S22	TI Anxiet* OR AB Anxiet*	224,320
S21	TI (("Social Isolation" OR "Social Anxiety Disorder*")) OR AB (("Social Isolation" OR "Social Anxiety Disorder*"))	12,649
S20	TI ((Loneliness OR lonely)) OR AB ((Loneliness OR lonely))	9,945
S19	TI Loneliness OR AB Loneliness	8,819
S18	TI (("Schizophreni*" OR "Schizotypal Personality Disorder*")) OR AB (("Schizophreni*" OR "Schizotypal Personality Disorder*"))	130,312
S17	TI Dementia OR AB Dementia	122,481
S16	TI (("Seasonal Affective Disorder" OR SAD)) OR AB (("Seasonal Affective Disorder" OR SAD))	12,645
S15	TI Depressi* OR AB Depressi*	431,350
S14	S10 OR S11 OR S12 OR S13	348,666

#	Query	Results
S13	TI (("Psychological Well-Being" OR wellbeing OR well-being)) OR AB (("Psychological Well-Being" OR wellbeing OR well-being))	112,290
S12	TI Mental health OR AB Mental health	181,322
S11	TI ((Mental AND (problem* OR health difficult*)) OR AB (Mental AND (problem* OR health difficult*))) OR AB ((Mental AND (problem* OR health difficult*)) OR AB (Mental AND (problem* OR health difficult*)))	58,444
S10	TI ((Mental AND (disorder* OR health disorder*)) OR AB (Mental AND (disorder* OR health disorder*))) OR AB ((Mental AND (disorder* OR health disorder*)) OR AB (Mental AND (disorder* OR health disorder*)))	105,320
S9	S1 OR S2 OR S4 OR S5 OR S6 OR S7 OR S8	2,110
S8	TI (((Lewis OR Harris OR Barra OR Skye OR Iona OR Coll OR Hoy OR Tiree OR Mull OR Jura OR Lismore) AND (island* or isle*))) OR AB (((Lewis OR Harris OR Barra OR Skye OR Iona OR Coll OR Hoy OR Tiree OR Mull OR Jura OR Lismore) AND (island* or isle*)))	571
S7	TI ((Arran OR "Great Cumbrae" OR Bute OR Gigha OR Islay OR Colonsay OR Luing OR Seil OR "Eilean Loain" OR Easdale OR Kerrera)) OR AB ((Arran OR "Great Cumbrae" OR Bute OR Gigha OR Islay OR Colonsay OR Luing OR Seil OR "Eilean Loain" OR Easdale OR Kerrera))	156
S6	TI ((Eigg OR Scalpay OR Raasay OR Berneray OR "North Uist" OR "Uibhist A Tuath" OR "South Uist" OR Vatersay OR Barraigh OR Eriskay OR Benbecula OR Flodda OR Grimsay OR "Great Bernera")) OR AB ((Eigg OR Scalpay OR Raasay OR Berneray OR "North Uist" OR "Uibhist A Tuath" OR "South Uist" OR Vatersay OR Barraigh OR Eriskay OR Benbecula OR Flodda OR Grimsay OR "Great Bernera"))	97
S5	TI ((Flotta OR Burray OR Ronaldsay OR Shapinsay OR Stronsay OR Rousay OR Eday OR Sanday OR "Papa Westray" OR Westray)) OR AB ((Flotta OR Burray OR Ronaldsay OR Shapinsay OR Stronsay OR Rousay OR Eday OR Sanday OR "Papa Westray" OR Westray))	39
S4	TI (("Fair Isle" OR Bressay OR Whalsay OR Housay OR Yell OR Fetlar OR Unst OR "West Burra" OR Trondra OR "East Burra" OR "Muckle Roe")) OR AB (("Fair Isle" OR Bressay OR Whalsay OR Housay OR Yell OR Fetlar OR Unst OR "West Burra" OR Trondra OR "East Burra" OR "Muckle Roe"))	73
S3	S1 OR S2	1,247
S2	TI (("Inner Hebrides" OR "Slate islands" OR "The Small Isles" OR "Outer Hebrides" OR "Orkney islands" OR "Shetland islands" OR "Skerries islands" OR "Northern Isles" OR Orkney OR Shetland OR "Western Isles")) OR AB (("Inner Hebrides" OR "Slate islands" OR "The Small Isles" OR "Outer Hebrides" OR "Orkney islands" OR "Shetland islands" OR "Skerries islands" OR "Northern Isles" OR Orkney OR Shetland OR "Western Isles"))	1,203
S1	TI "Scottish isl*" OR AB "Scottish isl*"	52

Appendix C: List of studies

Study ID	First author	Year	Source	Article / report title
1	Brown	1977	SSM	Psychiatric disorder in London and North Uist
1	Brown	1981	Psychol Med	Psychiatric disorder in a rural and an urban population: 1. Aetiology of depression
1	Prudo	1981	Psychol Med	Psychiatric disorder in a rural and an urban population: 2. Sensitivity to loss
1	Prudo	1984	Psychol Med	Psychiatric disorder in a rural and an urban population: 3. Social integration and the morphology of affective disorder
2a	Rosen	1978	Culture, Med & Psychiatry	The Shetland Islands: The effects of social and ecological change on mental health
2a	Caetano	1982	Brit J Addiction	The Shetland Islands: Drinking patterns in the community
2a	Voorhees	1989	Acta Psychia Scand	Shetland: Psychiatric symptoms and alcohol consumption in a community undergoing socioeconomic development
2b	Seyfrit	1988	Sociological Inquiry	A need for post-impact and policy studies: The case of the "Shetland Experience"
3	Bloor	1978	Report	Island Health Care: Access to primary services in the Western Isles
4	Rix	1982	Brit J Indus Med	Incidence of treated alcoholism in north-east Scotland, Orkney, and Shetland fishermen, 1966-70
5	Macritchie	1994	J Relig & Health	Celtic culture, Calvinism, social and mental health on the Island of Lewis
6	Lauder	2000	J Psychia & MH Nurs	The development and testing of the Mental Health Problems Perception Questionnaire
7	Simpson	2001	J Telemed & Telecare	The provision of a telepsychology service to Shetland: Client and therapist satisfaction and the ability to develop a therapeutic alliance
7	Simpson	2001	Clin Psychol & Psychother	The delivery of a tele-psychology service to Shetland
8	MacNeil	2001	Report	Preventing domestic abuse in the Western Isles: The community perspective
9	Burns	2002	Report	Formal services #13
9	Burns	2002	Report	Drop-ins #14
9	Burns	2002	Report	User networks #15

Study ID	First author	Year	Source	Article / report title
9	Philo	2002	Report	Introducing the findings papers #1
9	Philo	2002	Report	Highlands, Economy, Culture and Mental Health Problems #4
9	Philo	2002	Report	Remoteness, rurality and mental health problems #5
9	Philo	2002	Report	Social differences: Locals, incomers, gender, age and ethnicity #8
9	Philo	2002	Report	Spatial differences: East and west, Inverness and the rest #9
9	Burns	2003	Report	The place of Highland General Practitioners in the provision of mental health services #16
9	Parr	2003	Social & Cultural Geog	Rural mental health and social geographies of caring
9	Philo	2003	Report	Social geographies of rural mental health: Summary report
9	Parr	2004	Trans Inst Br Geog	Social geographies of rural mental health: Experiencing inclusions and exclusions
9	Philo	2004	Scottish Geographical Journal	'They shut them out the road': Migration, mental health and the Scottish highlands
9	Parr	2006	Chapter	'Not a display of emotions': Emotional geographies in the Scottish Highlands
9	Philo	2017	J Rural Studies	The rural panopticon
10	Simpson	2002	J Telemed & Telecare	Video-hypnosis - the provision of specialized therapy via videoconferencing
11	Stark	2004	BMC Public Health	Trends in suicide in Scotland 1981 - 1999: Age, method and geography
12	Thein	2004	Thesis (Edinburgh)	Intimate distances: Geographies of gender and emotion in Shetland
13	Fisher	2005	Dementia	Thomson Court: Integrating long-term care and community care in a rural community
14	Tearse	2005	Thesis (UHI/ Aberdeen)	Depressive symptoms in Ischaemic Heart Disease in the Western Isles of Scotland
15	Blackstock	2006	J Rural Studies	Living with dementia in rural and remote Scotland: Diverse experiences of people with dementia and their carers
16	Sutton	2006	Report	Geographic differences in the costs of delivering health services in Scotland: Implications for the national resource allocation formula

Study ID	First author	Year	Source	Article / report title
17	McLean	2007	Report	Evaluation of Scottish SafeTALK pilot
18	Chaplin	2010	Thesis (Glasgow)	Health and wellbeing in an island community where urban style deprivation and traditional rural values interact
19	Johnston	2011	Palliative Medicine	An evaluation of the use of Telehealth within palliative care settings across Scotland
20	Innes	2012	Report	Evaluation of tele-psychiatry as part of a memory service for people with dementia living in Grampian and the Shetland Islands: Final report
21	Martinez-Brawley	2012	BJSW	Revisiting Barra': Changes in the structure and delivery of social work services in the Outer Hebrides - are rural tenets stills alive?
22	Vaitheswaran	2012	Adv in Psychia Treatment	Telemental health: Videoconferencing in mental health services
23	Taylor	2013	Report	Report on the health impacts of wind farms Shetland 2013
24	Beel	2014	Report	Exploring value in digital archives and the Comainn Eachdraidh (CE)
24	Beel	2020	Social & Cultural Geog	Gathering together: Social capital, cultural capital and the value of cultural heritage in a digital age
24	Wallace	2021	Chapter	How cultural heritage can contribute to community development and wellbeing
25	Daly	2014	Thesis (UHI/ Aberdeen)	Mental health services and inclusion in remote and rural areas of Scotland and Canada
26	Roberts	2015	Int J Qual Studies on Health & WB	Striking a balance between in-person care and the use of eHealth to support the older rural population with chronic pain
27	Shiue	2015	Envi Sci Pollu Res	Correlations of indoor second-hand smoking rules, regional deprivation and children mental health: Scottish Health Survey, 2013
28	Carolan	2016	Eur J Cancer Care	General practitioners' 'lived experience' of assessing psychological distress in cancer patients: An exploratory qualitative study

Study ID	First author	Year	Source	Article / report title
29	Smith	2016	Pri Health Care Res & Dev	The impact of a support centre for people with sensory impairment living in rural Scotland
30	Warner	2016	BJGP	Escape to the country: Challenges of a migrant population for the rural GP
31	Beel	2017	J Rural Studies	Cultural resilience: The production of rural community heritage, digital archives and the role of volunteers
32	Skerratt	2017	Report	National Rural Mental Health Survey Scotland: Report of key findings
33	Support in Mind Scotland	2018	Report	Well Connected Communities: A study on community approach to mental health and well-being in five rural regions of Scotland
33	Support in Mind Scotland	2020	Report	Highlands and Islands Connections: Caring, connected communities - Putting the community at the centre of mental wellbeing
34	Scholtz	2018	BJPsych Int	Psychiatry in Shetland
35	Bowes	2018	Dementia	RemoDem: Delivering support for people with dementia in remote areas
36	Macaulay	2021	HEX	Public health perspectives on health improvement within a remote-rural island community
37	Sherriff	2019	Interim report	Fuel poverty in the Western Isles: 10 lessons: Interim report of the Moving Together project
37	Sherriff	2020	Report	Reshaping health services and fuel poverty in the Outer Hebrides: Final report of the Gluasad Còmhlà (Moving Together) project
38	Cunningham	2019	Thesis (St Andrews)	Adaptation to the impacts of climate change in small island communities: An analysis of Scottish case studies
39	Munoz	2019	Report	Final evaluation report of the Being Here Programme: Stakeholder experiences of changes to remote and rural healthcare services
40	Terje	2019	Interim report	T3.4.1 Mid-term evaluation report
41	Wherton	2020	Report	Evaluation of the Attend Anywhere / Near Me video consulting service in Scotland, 2019-20

Study ID	First author	Year	Source	Article / report title
41	Wherton	2020	Report	Evaluation of the Near Me video consulting service in Scotland during COVID-19, 2020
42	Crowther	2020	Report	Further Out: The Scottish LGBT Rural Equality Report
43	Kronsted Lund	2020	Annals Leisure Research	The vitalizing sea: Embodiment and wellbeing on a sea-kayak journey
44	NHS Orkney	2020	Annual report	Public Health Report 2019-20
45	Fixsen	2021	SAGE Open Medicine	Weathering the storm: A qualitative study of social prescribing in urban and rural Scotland during the COVID-19 pandemic
45	Fixsen	2022	QHR	Supporting vulnerable populations during the pandemic: Stakeholders' experiences and perceptions of social prescribing during Covid-19
46	Glass	2021	Report	Covid-19, lockdowns and financial hardship in rural areas: Insights from the Rural Lives project
47	Children's Parliament	2021	Report	"Ask us how we are": Children's Parliament investigates mental health and wellbeing.
48	Currie	2021	Report	Understanding the response to Covid-19: Exploring options for a resilient social and economic recovery in Scotland's rural and island communities - summary report
49	Macaulay	2019	Thesis (Glasgow Cale)	The role of community landownership in improving rural health in Scotland
50	MacMillan	2021	Report	Evaluation of the Creative Communities Programme: Phase One
51	NHS Shetland	2021	Annual report	Public Health Annual Report 2020-21
52	Wilson	2021	Report	National Islands Plan Survey: Final Report - Agriculture, Environment and Marine
53	Finlay	2022	Antiquity	An archaeology of dementia

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