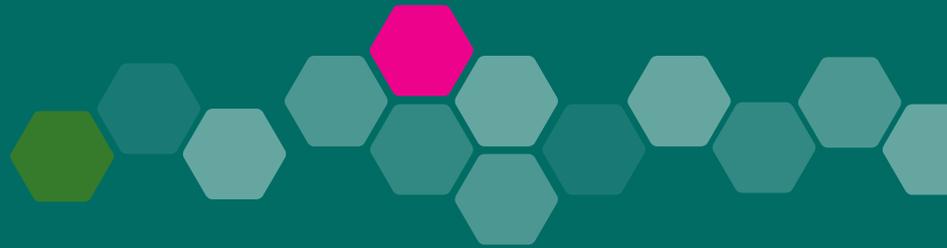




# Understanding the Drivers of Participation in Outdoor Recreation in Scotland



**AGRICULTURE, ENVIRONMENT AND MARINE**

# **UNDERSTANDING THE DRIVERS OF PARTICIPATION IN OUTDOOR RECREATION IN SCOTLAND**

**June 2021**

**Ipsos MORI Scotland**



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# Executive summary

Since 2012, there has been a significant increase in the number of adults participating in outdoor recreation on both an annual basis and a weekly basis. However, increased participation has not been seen across all groups, such as those with a long-term illness or disability, or among minority ethnic groups.

The aim of the research was to understand current attitudes to and behaviours towards outdoor recreation, and to provide recommendations on how the increased participation observed since 2012 can be sustained over the long-term, with any barriers to participation among lower-participation and equalities groups overcome.

The research was qualitative in nature and was conducted in two phases – 50 in-depth telephone interviews and an app diary (completed by 19 of the 50 participants). It employed a behavioural science approach to address the research aims systematically, by understanding the dimensions of behaviour that influence both why participation in outdoor recreation increases and whether it is sustained.

## Key findings

### Perceptions of and participation in outdoor activities

Overall, participants' views on the outdoors, including local spaces and outdoor activities in Scotland were very positive. The activities they took part in fell into three broad categories: walking; outings; and other sports or fitness activities.

### Factors motivating participation in outdoor activities

Participants identified a range of motivating factors that acted as drivers of participation in outdoor activities and that encouraged them to start or maintain their participation. These were:

- Improving and maintaining physical health and fitness - to help improve or maintain overall fitness and stamina, lose weight or be more physically active
- Mental health benefits, which were among the most important drivers of ongoing participation. Outdoor activities were credited with helping participants maintain and improve their mental health and wellbeing, allowing them to relax, unwind, and ease any worry, stress or anxiety
- Social and family benefits - one of the main reasons participants had started an outdoor activity was to spend time with family or friends, and these activities often played an important role in their social lives and routines
- Being closer to nature - enjoying Scotland's scenery and wildlife provided further inspiration for starting and maintaining outdoor activities
- Learning something or discovering new places - sightseeing and/or getting to know a new area was another reason given for starting or continuing an outdoor activity and was often motivated by cultural interests such as seeing new places in Scotland or finding out about its history.

## **Enablers and barriers to participation in outdoor activities**

Alongside the motivations above were factors that made it easier or more difficult for someone to participate in an activity. These included both individual, internal, factors and external factors. Internal factors that enabled or restricted participation in outdoor activities were: identity and values; routines; personal goals; knowledge and experience; and physical ability. External factors were: easy access to good quality local green spaces; physical infrastructure; childhood experiences; social and cultural norms; social connections and family; information and support from other channels; affordability, access to transport and equipment; available leisure time; weather and daylight; and lockdown restrictions due to the COVID-19 pandemic. Lockdown restrictions due to the COVID-19 pandemic had acted both as a barrier to participation in outdoor activities and as an enabler.

Since the research was not a longitudinal study, it cannot tell us with any certainty how participants' behaviours and attitudes towards outdoor activities have changed over time. However, it does highlight some key factors that may have played a role in increasing participation in outdoor recreation in Scotland:

- patterns laid down in childhood
- trying outdoor activities as a result of friends or family
- greater leisure time being available at particular lifestages
- an increase in dog ownership
- advice from health professionals
- technological advances (such as apps and smartwatches)
- the establishment of more activity-based social groups.

## **Guiding principles**

A set of guiding principles that could help to sustain participation in outdoor activities, and in some cases to widen participation among lower participation groups, were developed on the basis of the research findings using the MAPPS behaviour change framework. These guiding principles can be used to inform the design of interventions to help increase participation in outdoor activities in future.

The guiding principles are grouped as follows:

### **Motivational ('do I want to do it?')**

- Health professionals play an important role in prescribing outdoor exercise – particularly for minority ethnic groups where the benefits are not as well known.
- There may be scope to further advocate the mental health benefits of outdoor activities – these play a key role in sustaining participation but are not currently a main driver to starting activities.
- Strengthening the sense of identity people feel with an activity can help sustain and deepen participation.

- In designing interventions to encourage families to take part in outdoor recreation, there is scope to build on the view that doing outdoor activities with children is part of being a 'good parent'.
- Challenges and goals (e.g. walking 10,000 steps a day, running a 10k) act as useful ways of sustaining motivation. The use of technology, such as apps and fitness watches, can support these goals.

### **Ability ('am I able to do it?')**

- There is a role for greater information provision and communication of the benefits of outdoor activities, particularly among minority ethnic groups.
- There is scope to emphasise the range of activities that can be enjoyed, including by people who are less physically mobile.
- Childhood experiences can strongly influence sustained participation in outdoor activities in adulthood.
- Encouraging the development of new or adapted routines can help to build motivation for participation in outdoor recreation.

### **Physical ('does the context encourage the behaviour?')**

- Availability of good quality, easy to access local spaces helps to facilitate regular participation, while a lack of these can be a barrier in more deprived areas.
- The physical infrastructure and maintenance of outdoor spaces affects their accessibility, appeal and usage.
- Improvements to cycling infrastructure, and ways to help people build their cycling confidence and manage challenging cycling situations, may address some of the barriers to this activity.
- Available resources (financial, transport, equipment) affect both the range of activities people can do and the extent to which they can engage with them.
- The role played by life stage and personal and family circumstances – such as parenthood or retirement - should be borne in mind when considering opportunities to encourage participation.

### **Social ('what do other people do and value?')**

- Activity groups and organised trips can help both to initiate and to sustain participation.
- More informal social meetings for outdoor activities can also help to initiate and sustain participation.
- Cultural norms strongly influence knowledge, attitudes and behaviours, acting as both an enabler and a barrier.

# 1. Introduction

## 1.1 Background

Since 2006, increasing the number of adults who visit the outdoors for recreation at least once a week has been a Scottish Government National Indicator, with progress towards this being measured via the National Performance Framework<sup>1</sup>. ‘Outdoor recreation’ is defined by NatureScot as “any non-motorised activity carried out for leisure purposes” and includes a wide range of activities such as walking, picnicking, family outings, running, cycling, and water sports.

Visiting the outdoors and engaging with nature for leisure and recreation purposes has been shown to deliver a range of health, environmental and social benefits. These include providing opportunities for participants who visit the outdoors to relax and unwind, improve their physical health, feel closer to nature or enjoy the company of others<sup>2</sup>.

Since 2012, there has been a significant increase in both the number of adults participating in outdoor recreation on an annual basis (from 80% in 2012 to 88% in 2019) and a weekly basis (42% in 2012 to 56% in 2019)<sup>3</sup>. Over this period, weekly participation has increased amongst both men and women, across all age groups, and among some groups which have traditionally had lower levels of participation, such as those living in Scotland’s most deprived areas (although levels of participation remain lower than average). However, increased participation has not been seen across all groups, such as those with a long-term illness or disability, or members of the minority ethnic population.

Recently, participation in outdoor recreation has been affected by the COVID-19 pandemic, due to social distancing measures and restrictions on travel and sports and exercise activities. During the first phase of lockdown in Scotland, between 23rd of March and 28th of May, it was found that most people changed the amount of time they spent outdoors. Some groups, including those aged 70 or older and those with long term health conditions, were found to have reduced their time outside due to concerns about the virus, while other groups, including women, young people and families, increased the amount of time they spent outside due to the health and wellbeing benefits they experienced from doing so<sup>4</sup>.

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<sup>1</sup> <https://nationalperformance.gov.scot/visits-outdoors>

<sup>2</sup> [Scottish Natural Heritage \(2018\) Scotland’s People and Nature Survey: Participation in Outdoor Recreation](#)

<sup>3</sup> [NatureScot \(2020\) Scottish Household Survey 2019 – Visits to the outdoors: equalities data](#)

<sup>4</sup> [NatureScot \(2020\) Enjoying the Outdoors: Outdoor Visit Behaviour and Engagement with Nature in Scotland during the Coronavirus Lockdown](#)

In order to inform policy and the planning of future interventions and communications aimed at widening participation and addressing inequalities, the Scottish Government in partnership with NatureScot, is seeking to better understand the factors that are driving increases in participation in outdoor recreation, the relative importance of these different drivers and barriers, and how these differ among different population groups. It is against this backdrop that the Scottish Government commissioned Ipsos MORI to explore these drivers and barriers to participation in more detail.

## **1.2 Research objectives**

The aim of the research was to understand current attitudes to, and behaviours towards, outdoor recreation, and to provide recommendations on how the increased participation observed since 2012 can be sustained over the long-term, with any barriers to participation among low-participation and equalities groups overcome. This information is intended to help the Scottish Government, NatureScot, and its partner organisations, increase and widen recreational use of the outdoors, reducing inequalities in participation, and ensuring everyone enjoys the benefits.

The key objectives of the research were:

- to identify the specific factors that motivate different groups of people to visit the outdoors and to understand how these factors interact
- to understand the relative importance of different factors among different population groups, including those where the increase of participation in outdoor recreation has been less evident
- to provide an in-depth understanding of how and why behaviour and attitudes regarding visits to the outdoors have changed over the last few years, including any differences pre-COVID-19 and since COVID-19 times
- to utilise this understanding to make recommendations on how any positive changes in behaviour and attitudes can be sustained over the long-term
- to highlight opportunities to widen participation among lower participation groups.

## **2. Methodology**

### **2.1 Overall approach**

This research project was qualitative in nature and was conducted in two phases – 50 in-depth interviews and an app diary task (completed by 19 of the 50 participants). It employed a behavioural science approach to address the research aims in a systematic manner. The study was carried out in accordance with the requirements of the international quality standard for Market Research, ISO 20252.

### **2.2 In-depth interviews**

#### **2.2.1 Recruitment**

A sample of potential participants for the research was drawn from the Scottish Household Survey (SHS) re-contact database - a database of people who have previously taken part in the SHS and agreed to be re-contacted for future research. The demographic information provided in this database meant that we were able to target our recruitment to achieve sufficient representation of participants from particular groups, such as minority ethnic participants, or those with a disability or long-term health condition.

For the recruitment of minority ethnic groups, we supplemented the SHS database recruitment with assistance from the following gatekeeper organisations to recruit participants:

- Boots and Beards Walking Group
- The Conservation Volunteers
- Rainbow Muslim Women's Group.

The recruitment was carried out by an Ipsos MORI telephone interviewer who was provided with a script covering the purpose of the research and what taking part would involve. It was explained that participation was entirely voluntary and that participants could change their mind about taking part at any point.

Participants were offered a £30 payment to thank them for taking part.

#### **2.2.2 Sample**

Recruitment quotas were set on ethnicity, disability or other long-term health condition and level of area deprivation to ensure participants from groups within the Scottish population that are less likely to take part in outdoor activities were included in the research. In addition, we set quotas on gender, age, rurality, family type, employment status, and dog ownership to ensure that the sample was broadly representative of the Scottish population overall on these variables.

A quota was also set on the level of participation in outdoor activities, to ensure a mix of those who took part weekly or more often and those who took part less often than weekly. Since the focus of the research was drivers of participation in outdoor

activities, those who did not take part in any outdoor activities at all (around 12% of the adult population in Scotland) were excluded from the research.

Table 1 provides a breakdown of demographics and other characteristics of the sample.

**Table 1: In-depth interviews sample breakdown**

Target group	Number of interviews
<b>Gender</b>	
Male	24
Female	26
<b>Age</b>	
18-25	5
26-40	16
41-64	17
65+	12
<b>Ethnicity</b>	
Minority ethnic	14
White	36
<b>Residency</b>	
Urban <sup>5</sup>	40
Rural	10
<b>Health status</b>	
Disability/long term health condition	15
No disability/long term health condition	35
<b>Family status</b>	
Children living at home – 2 parent family	12
Children living at home – 1 parent family	8
No children living at home	30

<sup>5</sup> Based on Scottish Government's two-fold urban/rural classification: <https://www.gov.scot/publications/scottish-government-urban-rural-classification-2016/>

<b>Employment status</b>	
Working full-time	17
Working part-time	13
Not working	10
Retired	10
<b>Deprivation</b>	
More deprived areas – SIMD 1 or 2 <sup>6</sup>	25
Less deprived areas – SIMD 3, 4 or 5	25
<b>Dog owner</b>	
Yes	11
No	39
<b>Participation in outdoor activities</b>	
At least weekly	33
Less than weekly	17

### 2.2.3 Fieldwork

A total of 50 in-depth interviews with members of the public who took part in outdoor activities were conducted between 30<sup>th</sup> November 2020 and 8<sup>th</sup> February 2021. Interviews lasted around 45 minutes and were conducted over the telephone or using Microsoft Teams.

The in-depth interviews were based on a discussion guide to allow interviewers to have an open discussion with participants while ensuring they covered all the key points. The guide covered broad questions about participation in outdoor activities, before asking in more detail about specific activities. Interviews also explored participants' expectations of their future participation in outdoor activities. The discussion guide is included in Annex 1.

## 2.3 App diary phase

### 2.3.1 Recruitment

At the end of each in-depth interview, participants were asked if they would be willing to take part in the next phase of the research. Of those who agreed, 20 were selected to take part in the app diary phase.

<sup>6</sup> Based on the Scottish Government's Scottish Index of Multiple Deprivation (SIMD) quintiles: <https://www.gov.scot/collections/scottish-index-of-multiple-deprivation-2020/>

Participants were contacted by a member of the Ipsos MORI research team who explained what taking part would involve and provided instructions on how to download the Ipsos AppLife app on their smartphone.

Participants were offered a £40 payment to thank them for taking part in this phase of the research.

### **2.3.2 Sample**

Twenty participants were recruited to take part in the app diary phase. However, a week into the fieldwork period, and before they had recorded any entries on the app, one participant had to drop out of the study for personal reasons. Due to the late stage in fieldwork the decision was made not to replace them.

Participants were recruited to ensure a demographic mix across the target groups for the research.

### **2.3.3 Fieldwork**

The second phase comprised an app diary task among 19 participants who had previously taken part in an in-depth interview. This task used Ipsos' mobile research app – AppLife – and took place over a two-week period, between 1st and 14th March 2021.

The app diary phase asked participants to complete a diary task on their smartphone each time they took part in an outdoor activity over the two-week period. Participants were asked to describe their experience of the activity and their reasons for doing it, and to post a photo of the activity, if possible. They were also asked to complete two further one-off tasks: one to give their views on the open or green space nearest to them; and another to record a short video describing their experiences of taking part in outdoor activities during the fieldwork period. The Ipsos MORI research team monitored these tasks daily and asked follow-up questions to participants, based on their responses, to elicit further detail.

## **2.4 MAPPS behavioural framework**

Behaviour change research improves our understanding of why people demonstrate certain behaviours and a number of models exist to support this. In this study, we have used the MAPPS behaviour change framework<sup>7</sup>, developed by the Ipsos Behaviour Science team (Figure 1), to ensure a structured approach and the systematic exploration of the specific behaviours of interest. Specifically, MAPPS was used to shape the design of the discussion guide, the analysis of the data, and the development of recommendations.

MAPPS is based on the COM-B system and Behaviour Change Wheel<sup>8</sup> process and categorises, or 'diagnoses', behaviours, based on the series of factors shown in Figure 1. Once a behavioural diagnosis has been made, MAPPS also provides guidance on how this feeds through to shape how interventions could be developed

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<sup>7</sup> For a more detailed explanation of the MAPPS framework see: <https://www.ipsos.com/en/science-behaviour-change>

<sup>8</sup> <http://www.behaviourchangewheel.com/>

to attempt to change the behaviour. It does this through ‘Intervention Building Blocks’. These stem from the Intervention Functions element of the Behaviour Change Wheel and have been simplified and systemised in order to make them more actionable for a wider range of practitioners without the requirement of specialist Behavioural Science expertise to execute. The building blocks are not interventions in themselves, but rather provide ways of thinking about what an intervention should be delivering. The building blocks from the MAPPS behaviour change framework that can be used to develop interventions include:

- **Understanding:** building knowledge, help people see relevance and importance
- **Feedback:** providing positive or negative guidance, direction, or outcome expectancies
- **Planning:** developing and maintaining intentions or skills needed to perform a behaviour
- **Restructure:** changing environment to enhance or remove influences
- **Connect:** allowing connections to be formed or making these available as informational sources.

**Figure 1: Ipsos MORI MAPPS behaviour change framework**

MAPPS DIMENSION	MAPPS CATEGORY	CONTENTS	WHAT IT MEANS
Motivation	Outcome expectations	How estimation/predictions about outcomes affect motivations	I don't think it will work
	Emotion	How feelings/emotions and emotion regulation can support behaviours	I'm not feeling like doing it
	Internalisation	How behavioural motivation evolves from extrinsic to intrinsic	I don't want to do it
	Identity	How personal and social identities support behaviours	I'm not that kind of person
	Self-efficacy	How feelings of self-efficacy and mastery support change and persistence	I don't feel able to do it
Ability	Capability	How we learn new behaviours	I don't have the skills to do it
	Routines	How behaviours become habits, embedded in routines	It's not part of what I usually do
Processing	Decision forces	How heuristics, biases and behavioural regulation guides decisions and behaviour	How things are processed
Physical	Environmental factors	How the physical environment, context and resources sparks, supports or impairs behaviour change	How things are set up

Social	Social Norms	How group, transient or situational norms guide behaviour	What's expected of us
	Cultural Values	How broad cultural values affect behaviour	The way we live

## 2.5 Qualitative analysis

The analysis approach was based on a systematic thematic approach, intended to produce findings that are both clearly grounded in participants' accounts, and transparent and methodologically robust. The MAPPS behaviour change framework was used to structure the analysis.

Interviews were audio recorded with participants' consent, and detailed notes were made by the researchers following each interview. The transcripts and interviewer notes were then systematically analysed to identify the themes that emerged in relation to the research questions and discussion guide areas. These themes and emerging findings were recorded using Excel.

The research team met both during the fieldwork phase and after fieldwork completion to discuss emerging themes and then interrogate these in more detail. Taking the research objectives as a starting point, a thematic map of the issues arising during interviews was created. During this process, key drivers of participation, including motivating factors, enablers and barriers, were identified and grouped into broad thematic categories. The thematic map was then added to further once data from the app diary phase was available.

Summarising and organising the data in the way described above enabled it to be systematically interrogated to identify the full range of views and experiences.

## 2.6 Limitations

As with any study, there were a number of limitations to the research.

Firstly, unlike survey research, qualitative research does not aim to produce a generalisable summary of population attitudes, but to identify and explore the different issues and themes relating to the subject being researched. This research therefore does not claim to represent the wider views of all those participating in outdoor recreation in Scotland. Although the extent to which they apply to the wider population, or specific sub-groups, cannot be quantified, the value of qualitative research is in identifying the range of different issues involved and the way in which these impact on people.

Secondly, the decision was taken to conduct the research among those who already participated in outdoor recreation (whether at least weekly or less often), rather than among those who did not participate in outdoor activities. This was because the focus of the research was on drivers of participation. While participants did reflect on the barriers to participation in outdoor activities and their views and experiences are included in Section 5 of this report, other barriers to participation

might have emerged if the research had been broadened to include participants who did not already take part in outdoor recreation. However, taking a broader focus would have risked the research not being able to meet the research objectives that were set.

Thirdly, the research was conducted during the COVID-19 pandemic, which impacted on participants' outdoor recreation behaviours. This had value since it meant that we were able to draw some conclusions about how the lockdown restrictions due to the pandemic had acted both as a barrier and an enabler to participation in outdoor activities. However, it was also a limitation as it meant that the research was conducted during unusual circumstances and that behaviours changed as a result.

Lastly, since the research was not a longitudinal study, it cannot tell us with any certainty how participants' behaviours and attitudes towards outdoor activities have changed over time. However, it does highlight some key factors that may have played a role in increasing participation in outdoor recreation in Scotland, based on what participants told the research team about what had led them to increase their participation previously.

## **2.7 Report conventions and structure**

The findings in this report are organised thematically, so that findings from the in-depth interviews and the app diary task are reported together.

The remainder of this report is structured as follows:

- Chapter 3 gives an overview of participants' views of the outdoors and outdoor activities in Scotland, their levels of participation, and the main types of activities undertaken;
- Chapter 4 explores the different factors that motivated participants to take part in outdoor activities and the influence of each in both motivating participants to start an activity in the first place and maintaining their participation over the longer term;
- Chapter 5 outlines the different factors that acted as enablers or barriers to starting and sustaining participation, including both internal factors, such as having the knowledge or confidence to do the activity, and external factors, such as being able to access locations at which to do the activity or being able to afford the equipment required;
- Chapter 6 provides a series of guiding principles which the research suggests will help to sustain positive changes in attitudes and behaviours towards outdoor activities and widen participation among groups where it is currently lower.

### 3. Overview of perceptions of and participation in outdoor activities

This section gives an overview of participants' views of the outdoors and of outdoor activities in Scotland, and the types of outdoor space they used. It outlines their levels of participation, including a note on the impact of the pandemic, and the main types of activities they undertook.

#### 3.1 Views of the outdoors and outdoor activities in Scotland

##### 3.1.1 First associations

First associations with the outdoors and outdoor activities in Scotland were largely very positive. When asked what first came to mind, participants thought of beautiful natural scenery, favourite places, favourite activities, and the local parks or facilities available nearest to them. Participants also expressed feelings of pride and good fortune at living in or near a beautiful space.

*"We are very lucky to have a beach on our doorstep, very nice walks round about."*

Female, aged 65+, rural area

*"I've done a lot of Munro bagging, and that's really my number one activity. But other things that come to mind... I don't know if this is an activity but even driving through the Highlands is quite nice, it's much different scenery to what you get down here. (...) I quite like scenery, hills and the lakes and the contrasts."*

Male, aged 26-40, rural area

While negative associations were far outweighed by the positive, the primary negatives which came to mind were problems of litter spoiling a space and the unpredictable and limiting nature of the weather in Scotland.

*"It is a bit weather-dependent even if you are in the best of health, but basically I think Scotland is a great place for outdoor activities."*

Male, aged 65+, urban area

### 3.1.2 Types of outdoor space

Broadly speaking, there were three types of outdoor space that participants reported using:

- managed communal spaces, often urban/semi-urban, with built functional features to cater for different groups (such as paths, benches, playparks and sports facilities) and aesthetic features (such as gardens and other ornamentation)



*“Walking to the local park with my son. It was an overall enjoyable walk. In particular, we enjoyed seeing the birds and spring flowers.”*

**Female, aged 26-40, urban area (app diary phase)**

- natural and fairly ‘untouched’, rugged spaces, usually in countryside and more remote areas, but also existing close to urban areas



*“I went for a walk with a friend in the woods around my house in rural Aberdeenshire. It started raining halfway during the walk so that was a bit of a letdown.”*

**Female, aged 26-40, rural area (app diary phase)**

- paid spaces that cater for a specific interest, such as an aerial assault course, a golf course or a historic property garden.



*“Round of golf with my usual golfing partner. Great to get out for the first time this year as the course has been closed [due to COVID-19 restrictions].”*

**Male, aged 65+, urban area  
(app diary phase)**

- The more managed communal spaces had the widest and most frequent use. These were usually local to the user requiring little if any travel. While paid managed spaces were also popular, factors such as fees, travel requirements and the specific offer of the space mean that these tended to be used less commonly.
- The more natural and rugged spaces were used primarily for walking and hill-walking, as well as running, cycling and nature-watching. While participants enjoyed the idea of this type of space (as the epitome of beautiful, wild Scottish scenery), actual use varied, with these spaces being used less by families and by older and/or less mobile participants. They were also less easily accessible for all, often requiring travel to reach them as well as some prior research or information.

The varying motivations for use, and the enablers and barriers presented by different types of spaces, are discussed in detail in Chapter 5.

## **3.2 Levels of participation**

Because the research was focused primarily on the drivers of participation, all participants were recruited on the basis that they had taken part in outdoor activities over the past 12 months and therefore had at least a minimum level of participation. However, within this, participation levels varied greatly from occasionally going for a walk, at the lower end, through to committing substantial time, effort and money on a regular basis to several different activities, at the higher end. In the app diary phase, participants took on average eight visits for outdoor recreation over the course of a fortnight.

Levels of participation were affected by a combination of key motivating factors, enablers and barriers specific to the individual’s circumstances, a detailed discussion of which is provided in Chapters 4 and 5 of this report.

### **3.2.1 Coronavirus pandemic context of the research**

At the time of this study, all participants were living under some pandemic-related restrictions and had been, to varying degrees, over the previous eight to nine

months. These restrictions limited travel and social contact, and thereby disrupted normal work and leisure patterns, including participation in outdoor activities.

This had varying impacts on different groups, depending on factors such as working situation, age and health. These impacts are highlighted where relevant throughout the report. Discussion with participants covered pre-pandemic times as well as more recent activities in order to gain an understanding of more typical participation patterns. However, during the app diary fieldwork, participants were limited by restrictions in what they could do and the main activities reported were walking, running and cycling.

### **3.3 Activity types**

Participants took part in a range of outdoor activities which fell into three broad categories: walking; outings (e.g. sightseeing/visiting attractions); and other sports/fitness activities. Motivations for participation in each of these are summarised briefly below and discussed fully in Chapter 4.

Walking was widely enjoyed and considered a very easy activity to participate in - flexible in suiting different needs and abilities (short or long walk, gentle or brisk), requiring minimal cost, preparation or equipment and being easy to do in a wide variety of locations. It was also felt to have the added benefit of combining a number of purposes including walking dogs, getting children outdoors and active, commuting and interests such as nature and sightseeing. Hill-walking was considered to be a distinct activity which was more strenuous and specialised than 'going for a walk', requiring more in the way of equipment and knowledge.

Participants reported taking a range of different trips, including both regular, weekend activities and more occasional/summer outings. These trips included visiting different types of places (such as beaches, hills, forests, lochs, waterfalls), public attractions (such as gardens and parks, historic properties) and activities (playparks, aerial assault courses or outdoor karting). They tended to involve traveling somewhere outside participants' immediate locale and were often undertaken as family outings.

Other sports and fitness activities, perceived to require greater physical exertion, appealed particularly to fitter and younger groups. These included running (particularly popular among those wanting to lose weight/improve fitness) and cycling (this could be a high fitness sport, a family activity, casual local cycling or a mode of transport) as well as activities requiring more specialist skills or equipment such as team sports, water sports and winter sports.

## **4. Factors motivating participation in outdoor activities**

Participants identified a range of motivating factors that acted as drivers of participation in outdoor activities – their reasons for doing the activity – that encouraged them to start or maintain their participation, such as a desire to improve their fitness or spend time with their friends and family.

Alongside these motivations were factors that acted as enablers or barriers to starting or maintaining participation. Rather than being the reason(s) for doing an activity, these were factors that made it easier or more difficult for someone to participate in an activity. These included both individual, internal factors, such as having the knowledge or confidence to do the activity, and external factors, such as being able to access locations at which to do the activity or being able to afford the equipment required. These enabling factors and barriers are explored in detail in Chapter 5.

This chapter explores the different factors that motivated participants to take part in outdoor activities and the influence of these motivations across different behavioural outcomes – motivating participants to start an activity in the first place and to maintain their participation over the longer term. These motivations rarely existed in isolation but were instead found to build and reinforce other motivations, and participants were typically motivated by more than one factor.

The factors are summarised in Figure 2 below. Most factors motivated participants both to start and to maintain activities. The exception was mental health benefits, which were important in sustaining participation in outdoor recreation, but were not a factor that had encouraged participants to start doing outdoor activities in the first place.

**Figure 2: Motivations to starting and sustaining outdoor activities**

	<b>MOTIVATIONS FOR STARTING</b>	<b>MOTIVATIONS FOR SUSTAINING</b>
Physical health	Desire or need to improve physical health and fitness	Experiencing the physical health and fitness benefits
Mental health	[Not mentioned]	Experiencing the mental health benefits
Social and family benefits	Way of spending time with family and friends; benefits to others in their household	Existing role played by outdoor activity in social lives
Desire to be closer to nature	Wanting to see more of Scotland’s scenery and wildlife	Satisfaction and enjoyment gained from being closer to nature
Learning or discovering new places	Desire to learn something new and expand own/family’s horizons	Experiencing the benefits of learning and discovery of the outdoors

These motivating factors are described in turn below.

## 4.1 Improving and maintaining physical health and fitness

### 4.1.1 Role in starting outdoor activities

A desire to improve physical health and fitness had a particularly important role in motivating people both to start and to continue taking part in outdoor activities. Participants driven by this goal had chosen to start activities they thought would help them to improve or maintain their overall fitness and stamina, lose weight or be more physically active in general - typically walking (both hill walking and recreational walking more generally), and fitness activities like running or cycling.

*“I climbed my first Munro about four years ago... [I started] because I love the Loch Lomond and Glencoe area and it’s a good way to stay fit.”*

Female, aged 26-40, urban area

*“I started walking [because] I had reached a weight I had never been before, and that was a big trigger.”*

Female, aged 26-40, rural area

Older participants had typically started an activity to help them stay physically mobile and active, which they thought would help to alleviate some of the physical symptoms of ageing.

*“I mainly [started cycling] for fitness but a lot of it was to do with menopause and joint pain [...] I was trying different things to help it and I found that actually moving was the best thing, keeping your joints moving. So being active is the best thing to cope with many of the symptoms.”*

Female, aged 41-64, urban area

Others with specific health concerns had been motivated to start due to the perceived physical health benefits of an outdoor activity. This was a particularly important motivating factor for participants with long term health conditions (e.g. diabetes or musculo-skeletal problems) who hoped that regular exercise would help them manage or improve their condition. Being advised by their GP to start exercising was one example of a trigger to begin.

*“I was getting weighed and having borderline diabetes issues and the doctors were always saying I need to lose weight and exercise more. But I was never one for enjoying dieting or going to the gym. But I started [hill] walking and cycling and I kind of caught the bug.”*

Male, aged 41-64, urban area

Younger minority ethnic participants of South Asian origin also reported having been motivated to start outdoor activities due to concerns about their long-term health, specifically the risk of developing Type 2 diabetes, which they knew was more common in their ethnic group.

*“Diabetes is rife within my community. If I am to get that down the line why not make an early start at [preventing] it. If I know about the situation, I can control it at an earlier age than later down the line.”*

Male, aged 26-40, urban area

In terms of the specific activities participants chose to improve their physical health and fitness, younger participants and those looking to achieve a higher degree of fitness improvement and/or weight loss tended to choose more physically demanding fitness activities such as running, cycling or hill walking. Older participants, or those with a disability or long-term health condition, were more likely to have started walking for recreation more often. Walking held particular appeal among this group because it was seen as an accessible and manageable form of exercise for someone of their age and ability that could easily be incorporated into their daily life and which helped them to remain active and mobile, particularly after they retired.

*“The longer you keep going and the more mobile you are, the less you will feel crippled – it's to do with joints and muscles. If you're feeling stiff, you can [go for a] walk.”*

Male, aged 65+, rural area

These types of outdoor activities were generally seen as preferable to indoor exercise, especially among participants who said they were ‘not a gym person’. These participants reported that they found it more enjoyable and stimulating to take exercise outdoors, rather than indoors on a treadmill or exercise bike.

*“I wouldn't go to the gym three or four times a week just for the physical activity. I choose a physical activity that gives me fresh air and views.”*

Female, aged 41-64, urban area

#### **4.1.2 Role in maintaining participation in outdoor activities**

Experiencing the physical health and fitness benefits that they had hoped for when they took up the activity also encouraged participants to maintain their participation. They reported experiencing a number of physical health benefits, including increased energy levels and weight loss, as a result of these activities, which motivated their ongoing participation.

*“I'm relatively fit so I don't find [hill walking] too challenging, though occasionally it can be hard, but I always push through because I know it's doing me good, and then after it I always feel energised and better.”*

Female, aged 41-64, urban area

*“I did manage to lose weight [walking], almost half a kilo a month.”*

Female, aged 26-40, rural area

Highly active participants tended to say they had maintained an active lifestyle since they were young and, as discussed in the following chapter, saw outdoor activities as part of their personal identity or aligned with their personal values. Among this group, continued participation in activities like running, cycling and hill walking helped them to maintain their fitness levels. High levels of fitness were required for them to pursue physically demanding hobbies or goals such as long distance cycling, Munro bagging or marathon running.

Participants reported experiencing negative effects if they were unable to do an activity as much as they normally would. These included a drop in fitness and energy levels, feelings of lethargy and the development of 'bad habits' more generally, such as reverting to a more sedentary lifestyle or unhealthy eating habits. A desire to avoid these effects helped to motivate regular, ongoing participation.

*"If I'm not out [running] as much it's so easy to do things like not watching what you eat, and you get out of that fitness frame of mind."*

Female, aged 26-40, urban area

Older participants and those with physical health conditions who had started an activity to increase and improve their mobility found that the activity did indeed help them to achieve this, which encouraged them to keep doing it. These participants noted detrimental physical effects such as soreness and having difficulty moving when they did the activity less frequently.

*"If for some reason you can't get out, you feel sluggish, your body just feels not at 100 per cent. It's not functioning the way it should."*

Male, aged 65+, rural area

*"If I'm stuck in the house for long periods of time, I feel rubbish. I'll feel more stiff and sore if I don't go [walking] regularly enough."*

Female, aged 41-64, urban area

One participant of South Asian origin, who had started hill walking in part to manage his diabetes, had been inspired to continue by a member of his walking group who said that regular hill walking had helped him reverse his condition.

*"One of the guys was on meds because of his diabetes and by joining our [walking] group he has pretty much eliminated most of his medication."*

Male, aged 65+, urban area

## 4.2 Mental health benefits

Mental health benefits experienced through doing outdoor activities were among the most important drivers of ongoing participation. However, despite the importance that participants gave to the mental health benefits, these were not directly mentioned as a reason for *starting* an activity. These benefits were something participants noticed as a result of doing an activity, rather than being a driver that motivated them to start an activity in the first place.

Participants tended to talk about the mental health benefits of an activity in relation to recreational walking, although cycling and running were also mentioned. These activities were credited with helping participants maintain and improve their mental health and wellbeing, both during and after the activity, allowing them to clear their mind and to relax and unwind, by getting away from the distractions or worries of home or work-life responsibilities.

*“The walking definitely sustains me mentally. I feel calmer and able to deal with stress better.”*

Female, aged 41-64, rural area

*“I find [walking] calms me and you’re getting away from your chores and the TV. You can hear your own thoughts a bit better and you get peace to think about things and the people that are no longer with you.”*

Female, aged 41-64, rural area

These activities helped to improve participants’ mood, and could often make them feel happier or more positive by easing any worry, stress or anxiety they were experiencing. They also had the benefit of improving sleep quality, due both to the effects of physical exercise and helping them to relax more.

*“[Walking] improves my concentration, and I feel happier and more relaxed. Especially when I go to bed, I can sleep better.”*

Female, aged 26-40, urban area

These benefits were particularly important for participants during COVID-19 lockdown restrictions, with outdoor activities often giving them an opportunity for respite from home or work, and in some cases, from worries relating to the pandemic itself.

*“As someone who works from home in front of screens, this 40 minute walk is a godsend and freshens up my mood and energises me for my day ahead.”*

Male, aged 26-40, urban area (app diary phase)

*“It doesn’t take very long for any staleness from sitting about in the house all day or for any of this bad news in the papers to go away. After about ten, fifteen minutes [walking], that’s away at the back of your mind, so you feel better quickly.”*

Male, aged 65+, rural area

Other positive mental health benefits were mentioned by participants who took part in activities they found physically demanding – for example, hill walking, running and cycling. These participants talked about experiencing a sense of achievement and fulfilment, or a feeling of positivity or elation, from completing a challenging, physical activity and/or being able to achieve a goal, such as reaching the top of a Munro or completing a run.

*“When you come back [from hill walking] you feel fresh and it’s like having a high dose of coffee, I think, you’re really buzzing.”*

Male, aged 26-40, urban area



*“It was a lovely day today, so it felt good getting outside and getting some fresh air. I enjoyed it also because it’s a long walk and intense at the start so when you reach the top you also feel some kind of achievement.”*

Female, aged 26-40, urban area  
(app diary phase)

Just as detrimental physical effects were experienced when participants reduced their outdoor activities, negative impacts on mental health and general wellbeing were also noted. Participants reported feeling more tense, frustrated or bad tempered than usual and, therefore, felt strongly that outdoor activities played an important role in helping them to manage their mental health, which helped motivate ongoing participation. This was particularly true for those with mental health conditions, such as anxiety or depression.

*“If I can’t get out as much, I feel anxious, edgy and cooped up. I just want to get out.”*

Female, aged 41-64, urban area

*“It’s important, because if I don’t [do it as much] I get more irritable. I do get low moods, there has been periods where I have had to go on antidepressants, so as part of my self-care [walking] really is very important.”*

Female, aged 26-40, urban area

Reflecting previous research on the topic<sup>9</sup>, the mental health benefits of outdoor activities could be linked to specific aspects of the outdoor environment. In general, these environments were seen as being ‘good for the soul’ and more conducive to relaxation and reflection than being indoors or in a busy urban environment.

*“I think more than anything else [hill walking] helps clears my head. There will be times when [I am] just contemplating things and working things through, planning for the week after and I get to do that in a very non-stressful way. I think it is more from being outdoors and in the fresh air because I do indoor sports as well and it’s not the same.”*

Female, aged 26-40, urban area

Participants typically spoke of the mental health benefits of being outdoors in relation to natural and ‘untouched’ environments, such as the countryside or the beach. These environments provided opportunities for ‘peace and quiet’ away from the distractions of home and the busyness of urban environments, such as crowds and traffic. Participants noted that, as a result of being in a more peaceful environment, their mood improved and they felt calmer and more relaxed, both during and after the activity. There was also a belief that being outside in the fresh air and sunshine (weather permitting) invigorated them and made them feel more positive in general.

*“I started [hill walking] more because I got fed up going to the gym or doing indoor activity, and I wanted to be outside, getting fresh air. It’s my time for peace and quiet, going to the top of a hill and being the only person there. I crave the solitude and it’s really helped my mental health.”*

Female, aged 41-64, urban area

## **4.3 Social and family benefits**

### **4.3.1 Role in starting outdoor activities**

Social motivations were a further driver of participation, with participants motivated in this way reporting that one of the main reasons they started an activity was to spend time with family or friends.

One way in which this had happened was by participants who had done certain outdoor activities with their families when they were children restarting similar

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<sup>9</sup> See for example: <https://www.nature.com/articles/s41598-019-44097-3>

activities in their adult life once they had a family of their own. These activities were opportunities for families to spend quality time together:

*“If the family are going out [together] it is to make memories, to bond, and to have experiences together.”*

Male, aged 26-40, urban area

In another example, one participant of South Asian origin recounted his family’s recreational walking trips which had initially started both as a way of getting different members of the family together outside of gatherings such as birthdays and holidays, and as a way of getting their children outdoors and “away from their phones and laptops”. However, these trips had rapidly grown in popularity and become a much wider social activity after he started posting photos on social media and other family members and friends started to ask if they could join them on future walks. The popularity and frequency of the outings grew to the extent that he realised there was a demand for these activities among this minority ethnic group in his area and so, with his family members, he founded a walking group for the Asian community in Scotland.

*“Having a community feel and knowing like-minded individuals will be going along has helped it grow. And by getting kids involved we hope the community will continue to participate in growing numbers.”*

Male, aged 26-40, urban area (app diary phase)

In other cases, participants, particularly those who were new to an area or to Scotland, started an activity because they saw it as a good way to make and maintain new friendships or social groups. They reported starting an activity after being asked or encouraged by family or friends to join them in an activity – for example being invited by a group of friends to go hill walking or cycling – or because the social group or club they were part of, such as a church or community group, organised the activity for its members.

*“I started my [university course] in 2015, and the group of friends I made there were all into hill walking so I went with them.”*

Female, aged 26-40, urban area

While participants had typically started an outdoor activity for the benefits to them personally, some started an activity for the benefits to others in their household, for example, parents who had started walking or cycling with their children. Alongside the benefits of spending time together as a family, these activities had the added benefits of keeping their children active and, in some cases, giving them a break from screens.

*“The problem is that the children they want to be on gadgets all the time, so I [suggested] to do an outdoor activity with [them] and they chose bike riding.”*

Male, aged 41-64, urban area

A further motivation was to facilitate a child's hobby – for example, taking up cycling, or going for regular walks so a child can pursue their interest in photography.

*“We started [cycling] a few years ago, really just because it's something my son enjoys.”*

Female, aged 26-40, urban area

*“The girls are interested in photography now, so I've been going out [walking] with them a lot more.”*

Female, aged 41-64, rural area

Parents were motivated to do such activities with their children by values such as this being part of 'being a good parent' or it being important to them to enable their children to experience new things and take part in activities they enjoyed. These factors could help participants to overcome any resistance they themselves felt towards doing an activity. For example, a single parent whose health condition (fibromyalgia) limited her participation in outdoor activities said that the importance of taking her son out and giving him opportunities to stay healthy and enjoy himself could help her to overcome any difficulties she had motivating herself to go out.

*“My son is absolutely my motivation. He loves getting out and about. Sometimes my illness can create barriers, but I still go out and he can do things and I'll just watch.”*

Female, aged 41-64, urban area

#### **4.3.2 Role in maintaining participation in outdoor activities**

The social benefits of outdoor activities were also important in maintaining participation, with outdoor activities often playing an important role in participants' social lives.

Activities such as recreational walking provided an opportunity for participants to meet and spend time with family, friends, or members of a club, like a walking group. These could be regular social activities that had become part of weekly or monthly routines, or more occasional or ad hoc arrangements.

*“I do quite a lot with my wife, if we're going to the beach or cliffs, because she really likes the seaside. And we have pals, two sets of pals, both of whom are keen walkers, and that's when we go for longer walks because we meet up with them regularly and specifically do these walks.”*

Male, aged 65+, rural area

Social benefits were also particularly important for participants involved in team sport activities like football or hockey, for whom the social aspect of the activity was a central motivating factor.

*"[Playing hockey] is a social thing, it's to keep fit, it's a break away from everything else that's going on... But [my main reason for doing it] is probably the socialising side of things."*

Male, aged 26-40, urban area

The social aspect of outdoor activities had become particularly important during lockdown restrictions, since outdoor meetings were one of the few ways in which participants could see people from outside of their own household. This was particularly evident in the app diary phase of the research where meeting up with a friend was a key motivation for taking part in an activity.



*"Due to lockdown, going for a walk is the only way we can meet other people, so it cheered me up catching up with a friend. The exercise was also great as the rest of the time I'm at home and walking helps me relax and sleep at night."*

Female, aged 26-40, rural area  
(app diary phase)

*"It is always uplifting to get out in the fresh air with a friend especially at present when we are so restricted."*

Male, aged 65+, urban area (app diary phase)

There were examples of outdoor activities increasing in social importance over time – where a participant had started an activity to improve their fitness, for example, but was motivated to continue more because of the social benefits experienced. Indeed, in some cases, outdoor activities were predominantly social activities that participants reported they would rarely, if ever, do on their own, because they felt they would not get the same satisfaction or enjoyment out of it.

*"You get good banter with everyone, so I much prefer [hill walking] with a group."*

Male, aged 26-40, urban area



*“The social side [of golf] is very important to me. A chance to catch up with friends. I would be reluctant to play alone.”*

Female, aged 41-64, urban area  
(app diary phase)

Participants also reported that doing an outdoor activity with others brought about increased mental health benefits. For example, participants derived satisfaction and enjoyment of being in the company of friends or family, or felt a sense of camaraderie in taking part in a group or team activity.

*“The group walking is different [than walking alone]. It just gives you a good feeling to be with people. It's good to be together and share things and have a laugh really. And you can help some people if they have got problems and give advice.”*

Female, aged 65+, rural area

The social benefits of activities also had particular importance for older participants. Outdoor activities were one of the main ways in which they met with other people outside their household and so were a key aspect of their social lives. Older participants living alone also found that doing outdoor activities with others helped to alleviate any loneliness or boredom they felt at home.

*“Particularly since I've been living on my own, I would say the main reason [I play golf] is the social side. I look forward to going out, I enjoy it when I'm there and I feel better for having been out in the fresh air and meeting people.”*

Male, aged 65+, urban area

#### **4.4 Being closer to nature**

Enjoying Scotland's scenery and wildlife provided further inspiration for starting activities that involved being outdoors and closer to nature.

*“I love Scotland and wanted to see how it looked from the top of a mountain.”*

Female, aged 26-40, urban area

In particular, minority ethnic participants who had moved to Scotland mentioned Scotland's scenery and abundance of greenery as something that had inspired them to start taking part in outdoor activities, like walking and cycling, saying that it

had not always been easy or comfortable to spend time outside and close to nature in their homeland due to the hot climate.

*"I come from Mumbai in India, which is very humid and very hot, so you tend to not get as much time [outside] with nature, and I really enjoy just being able to be outside in Scotland and with that much green around it is really nice."*

Female, aged 26-40, urban area

This factor also played a role in ongoing participation, with participants reporting satisfaction and enjoyment from these aspects of the outdoors. Participants noted that, since starting an activity, they had developed a greater appreciation for the outdoors and the natural landscape, and an interest in aspects such as observing the local wildlife and noticing the effects of the seasons.

*"When you're cycling you can stop any time you like and watch whatever you like, whether it's curlews in the field, or herons or red squirrels ... So you can be out and see things that you would never see from a car."*

Male, aged 65+, urban area

*"I think it is really important just to be out and about, and it is gorgeous. Sometimes I just have to stop and just take pictures of it, especially now in autumn, with all the leaves going yellow and red."*

Female, aged 26-40, rural area



***"I particularly like the footpaths because it's away from the road so it's very pretty and peaceful. Today I saw a red squirrel and that made my day as they're usually quite shy and hard to spot."***

**Female, aged 26-40, rural area  
(app diary phase)**

An interest in nature was evident among participants living in rural areas, who felt particularly connected to their local environment. Some explained that they were interested in local conservation and felt it was important to check on the impacts of human activity on the landscape over time.

*"I've got a beautiful view, I've got outdoor space, I can go right up there to the top of the hill and walk down, and I can walk about the hills. It is very beneficial for me, I just love it."*

Female, aged 65+, rural area

*"We appreciate the space that's around us and it's important to see how it's doing. In some places we can see how it's been damaged by things like game shooting."*

Female, aged 41-64, rural area

#### **4.5 Learning something or discovering new places**

Sightseeing and/or getting to know a new area was another reason given for starting or continuing an outdoor activity. These activities, typically walks or outings to local sights and landmarks, including paid spaces, were motivated by cultural interests such as seeing new places in Scotland or finding out about its history. Parents viewed this as particularly important, in order that their children could discover and learn more about Scotland.

*"These trips expand your knowledge about places... and it's good to go places the kids haven't been to so they can learn about them."*

Female, aged 41-64, rural area

*"Every summer I choose a different place, like a beach, to visit with the children. I have always thought that we need to do something new with the children [for them] to experience different things."*

Male, aged 41-64, urban area

These activities had also been started by participants who had recently moved to a new area in Scotland, including minority ethnic participants who were relatively new to Scotland, as a way to familiarise themselves with their new locality or Scotland more widely.



*"We have started these family walks since we came to Scotland. My children are always excited about the different animals we can see on the walks, and we learn about the area we live in."*

Male, aged 26-40, urban area  
(app diary phase)

## 4.6 Understanding change over time

This research provides an in-depth look at the factors motivating people to start and to sustain outdoor activities. Since it is not a longitudinal study, it cannot tell us with any certainty how participants' behaviours and attitudes towards outdoor activities have changed over time, as we do not have any prior data points to compare with.

Participants were however asked to reflect on how their behaviours and attitudes towards visits to the outdoors had changed over the past few years. Analysis of this data provides some indication as to the factors that may underlie the shift towards increased participation in outdoor recreation in Scotland.

Inevitably there will also be other factors not mentioned by the research participants directly that are likely to have influenced this shift, such as a greater societal focus on maintaining physical and mental health and wellbeing, and on staying active in retirement. Existing evidence has already highlighted some factors that may have contributed to the increases, namely:

- an increase in the proportion of people in Scotland participating in recreational walking since 2007, although participation appears to have plateaued more recently<sup>10</sup>
- an increase in the proportion of shorter duration outdoor visits and visits taken closer to home, indicating that more people are finding opportunities to explore local nature<sup>11</sup>
- an increase in the numbers of people walking to the destination of their outdoor visit rather than using a car<sup>12</sup>
- increased investment in the provision of green space, paths and routes close to where people live<sup>13</sup>
- increased awareness of the physical and mental health benefits associated with visiting the outdoors and spending time in nature ('health and exercise' is identified in Scotland's People and Nature Survey<sup>14</sup> (SPANS) as a main motivating factor for outdoor visits), along with increased provision of opportunities to participate in organised activities, such as Health Walks or Park Run.

Based on our qualitative research, key factors that may have played a role in increasing participation in outdoor recreation include:

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<sup>10</sup> NatureScot (2020), 'Scottish Household Survey 2019. Visits to the outdoors – equalities data'. <https://www.nature.scot/sites/default/files/2021-03/Scottish%20Household%20Survey%20-%202019%20-%20Equalities%20data%20-%20Visits%20to%20the%20outdoors.pdf>

<sup>11</sup> NatureScot (2020a), *ibid.*

<sup>12</sup> NatureScot (2020a), *ibid.*

<sup>13</sup> NatureScot (2020a), *ibid.*

<sup>14</sup> NatureScot (2020b), 'Scotland's People and Nature Survey 2019/20- outdoor recreation, health, and environmental attitudes modules'. <https://www.nature.scot/naturescot-research-report-1227-scotlands-people-and-nature-survey-201920-outdoor-recreation-health>

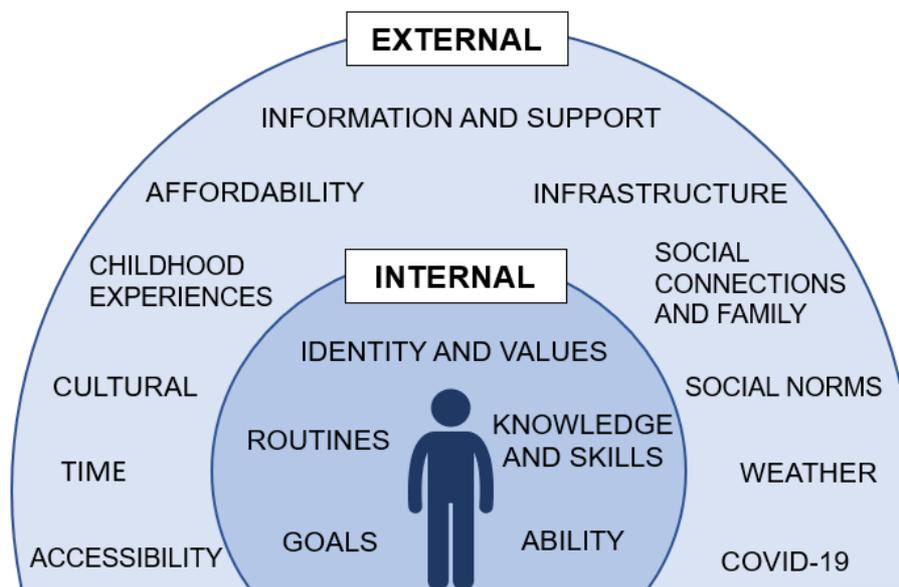
- patterns laid down in childhood – participants spoke of outdoor recreation having always been part of their lives through regular family activities
- trying outdoor activities as a result of friends or family who already do these activities encouraging others to come with them
- greater leisure time being available at particular lifestages, such as young adulthood or retirement (conversely, both parents of young children and older parents reflected on how they had reduced or stopped particular types of outdoor activities when their children were young)
- an increase in dog ownership – participants explained how getting a dog had meant that they had to get outdoors regularly to walk it, and there were those who had got a dog partly for this reason
- advice from health professionals – for example, the trigger of being advised by a GP to start exercising to help manage or improve a health condition was a motivation for some to start outdoors activity
- technological advances which have meant that there are more tools (such as apps) available to people to help them start and sustain their participation in outdoor activities, and
- more activity-based social groups having been established (such as minority ethnic walking groups).

As this indicates, there are numerous factors that influence individuals' participation in outdoor recreation. The guiding principles for intervention design outlined in the final section of this report take into account this range of factors that had led participants to increase and sustain their participation in outdoor activities.

## 5. Enablers and barriers to participation in outdoor activities

This chapter outlines the full set of factors that acted as enablers or barriers to starting and sustaining participation. Generally, these were the things that made it easier or more difficult for participants to start or continue participation in an activity. These enabling factors and barriers have been classified as either internal or external. Figure 3 below provides an overview of the enabling factors and barriers, which were identified from thematic analysis of the in-depth interviews. Each of these is then discussed in turn.

**Figure 3. Enablers and barriers to participation in outdoor recreation**



Since participants were recruited on the basis that they took part in outdoor activities, there was a natural emphasis in the research on enabling factors. However, important barriers to participation were also identified across the interviews. Since overcoming these barriers is key to widening and increasing participation in outdoor activities, where applicable, these have been highlighted below in addition to the enabling factors.

## 5.1 Internal enabling factors and barriers

Internal enabling factors are the individual, psychological and physiological factors or traits that were found to facilitate or restrict participants' participation in outdoor activities. These include:

- identity and values
- routines
- personal goals
- knowledge and experience
- physical ability.

### 5.1.1 Identity and values

Motivation levels varied, ranging from those participants with high levels of enthusiasm for and participation in outdoor activities, to those who were less engaged in some activities and found it more difficult to motivate themselves to take part regularly.

Levels of participation and motivation in outdoor activities tended to be higher among participants who were motivated by the health and fitness benefits of an activity and who saw the activity as part of their personal identity or aligned with their personal values. For example, participants who self-identified with an activity, thinking of themselves as a 'runner', 'cyclist' or an 'outdoors person', tended to have high levels of participation and say that the activity played an important role in their lives.

*"I'm a huge advocate of cycling, I could wax lyrical about it all day. [And] I think it's important for me to identify as a cyclist because there needs to be a lot done to promote cycling in Scotland. It is such a great country for cycling... we have so much to offer, [it's] such a beautiful country with so many great roads to travel."*

Male, aged 26-40, urban area

*"I'm a huge ambassador for the outdoors, I've climbed 200 Munros, and I've done a lot of climbing and trekking abroad as well, so I advocate getting outside in the fresh air at all costs, and up a hill or down a beach as much as possible."*

Female, aged 41-64, urban area

*"[Hill walking] is very important to me. Everyone knows me as a fit, positive, outdoorsy person. Doing it helps me to stay that way."*

Female, aged 26-40, urban area

These participants were enthusiastic and highly motivated to pursue and continue to take part in the activities that were important to them. As is evident from the above quotes, they often saw themselves as advocates for an activity and spoke passionately about the enjoyment and benefits they received from doing it.

Conversely, some participants found it difficult to motivate themselves to participate in outdoor activities. While this was sometimes due to factors such as a health condition or the weather, on other occasions it was simply that they just did not feel like doing it, or because the activity itself was not an important aspect of their life. However, participants tended to say that they would try to force themselves to go as they knew they would feel better after doing it.

*“Sometimes I can feel quite de-motivated, but once I push myself to actually go outside, in the middle of the walks I'm usually enjoying them, and afterwards I usually have a sense that I've done something with my day.”*

Female, aged 41-64, urban area



*“It was tough [to motivate myself]. I'm in between two busy nightshifts and I had little energy or motivation, but I knew [the run] would clear my head and make me feel better so I pushed myself to go.”*

Female, aged 26-40, urban area  
(app diary phase)

### 5.1.2 Routines

The extent to which taking part in an activity was part of a participant's everyday routine had an impact on ongoing participation. If an activity became part of a routine, it became familiar and habitual, and so participants found it easier to motivate themselves to do it.

One way in which outdoor activity had become part of participants' routines was for outdoor activity habits to be formed at a young age and to have continued into adulthood as just something that they do, almost without thinking about it.

*“We [went walking] as a family activity when I was young and I've just never really stopped. When I was fitter and younger I did longer hikes. Now that I've got older and less fit, we just modify what we do. [And] we still do it with our kids and grandkids.”*

Male, aged 65+, rural area

*"I've been walking since forever. It [started] more as a family thing, everyone got together to go for walks, a social kind of thing... It's definitely still a [regular] thing, but on my own, not so much with anyone else."*

Female, aged 18-25, rural area

Other participants had established new routines during their adult lives, such as going for daily walks on their own or with family, weekly games of golf with friends, or through involvement in social groups such as hill walking clubs. Over time, these routines established themselves and became a regular part of participants' recreational and/or social lives, and, as a result, easier to do.

*"I got into a routine, because my son gets picked up in the morning, and so I work until 11:00, at 11:00 I go for my walk, come back [...] and then work in the afternoon, and it is a nice break... Once I had the routine it was much easier [to do]."*

Female, aged 26-40, rural area

*"When I was working we played [golf] Sunday morning and, in the summer, a Wednesday evening. But now we're retired we play three mornings a week. It's usually, Tuesday, Wednesday, Friday."*

Male, aged 65+, urban area

Exercising a dog was another reason that participants had established a routine, since this made them start to take recreational walks at least daily as a result. Indeed, a reason given for getting a dog was to get more regular exercise themselves as well.

*"We've done much, much more [walking] since we got the dogs. And in fact, one of the reasons we got the dogs was to get us out more."*

Female, aged 41-64, urban area

More recently, lockdown restrictions during the pandemic resulted in new routines, such as regular lunchtime or after-work walks, being formed to give participants a reason to get out of the house and to add some variety to their lives. These routines were visible during the app diary phase of the research, with participants describing the daily walks they had started as a result of the lockdown restrictions. After noticing the benefits of these walks, participants hoped that their routines would continue to be part of their everyday lives even after lockdown restrictions come to an end.

*"These [lunchtime] walks are something I started during the pandemic. Since we are not allowed to socialise or do [other] activities, I found these local walks to be quite mind freshening. And absolutely, these walks will continue post-COVID."*

Male, aged 26-40, urban area (app diary phase)



*“I have always tried to get out in the evenings for a walk, but it's definitely been something I do way more regularly now with the lockdown! And I do think it'll be something I keep up with once the restrictions end. Especially as we come into the nicer weather.”*

**Female aged 18-25, rural area  
(app diary phase)**

### **5.1.3 Personal goals**

Setting personal targets or goals to stay motivated and to maintain or increase participation in an outdoor activity was another factor that had helped to improve participants' motivation. This was a particularly common enabling factor among highly active participants, whose participation in an activity was primarily motivated by maintaining or improving their physical fitness.

These participants said that setting personal goals or commitments, such as signing up to run a marathon, walking a given number of steps a day, or climbing a certain number of Munros in a year, helped to keep them motivated and focused on taking part in an activity, by giving the activity more purpose.

*“Just at the moment I am planning this kind of four or five-day adventure through the Cairngorms to bag something like 18 Munros. I've actually started planning that now.”*

**Male, aged 26-40, urban area**

*“I always try to take one hour a day for walking or exercise. And I will try to walk 10,000 steps a day.”*

**Female, aged 26-40, urban area**



*“Mainly my inspiration is to be and stay mountain fit as I’d like to go hut to hut in the alps in my retiral.”*

**Female, aged 41-64, urban area (app diary phase)**

These participants felt that if they did not have a target or goal to work towards their motivation could wane and they would do the activity less often.

*“I get out [running] once or twice a week [at the moment]. Last year I was running four times a week but because of COVID there’s no events or marathons on to work toward.”*

Female, aged 26-40, urban area

#### **5.1.4 Knowledge and experience**

Having the requisite knowledge and experience to be able to take part in an activity was another important enabling factor and was closely related to the confidence participants had in their ability to do an activity. This included having the knowledge and skills about how and where to do an activity as well as its benefits.

##### **How to do an activity**

Some outdoor activities such as hill walking, cycling or climbing required participants to have some level of skill or experience in order for them to have the confidence to be able to take part safely and successfully. Participants tended to have gained these skills in childhood or over time on their own, from another person or by being part of a group or club.

Meanwhile, participants who identified more specialist activities they would like to try in future, such as sailing or kayaking, felt they would only be able to do these if they received training first, either from someone they knew or by joining a club or class.

*“I would like to try my hand at sailing. My cousin recently bought a small boat, so I’m going to ask her to teach me how to sail.”*

Male, aged 41-64, urban area

Levels of skill or experience tended to reflect how confident participants were in carrying out an activity and dealing with any health and safety risks. This had influenced how and when they took part. For example, there were varying levels of confidence among cyclists in regard to cycling on roads alongside traffic. This

ranged from experienced cyclists who were confident in their ability to do this, to novices who expressed concerns about their safety and a lack of provisions for cyclists.

*“I would say I find [cycling] easy, but then I've been doing it for a while, I'm quite knowledgeable about the roads and I'm confident as well.”*

Male, aged 26-40, urban area



The example of a participant who was keen to take up cycling illustrates the importance of confidence and skill level. This participant mentioned that she lacked confidence and felt she needed to practice before cycling on a road or trail. She felt self-conscious about doing so, which made it more difficult to motivate herself to start.

*“I feel a bit unconfident about [cycling] and, I guess, there’s lots of other really proficient cyclists around, so if I could go to a place where I’m on my own I’d feel better.”*

Female, aged 41-64, urban area

Confidence and skill level also affected hill walkers. Experienced hill walkers tended to say they were confident in their navigational skills or dealing with inclement weather conditions. In contrast, less experienced hill walkers said they would only do the activity with someone more experienced due to a lack of knowledge and confidence in what to do if something went wrong, such as having an accident or getting lost.

*“I would typically do more Munros in the summer time but, without the coronavirus, I would do them all throughout the year if I could. I have winter skills training and I've been out in snow and ice and I've got the equipment, so I'm ready to do that.”*

Male, aged 26-40, urban area

*“If [my wife and I] are with a group, it takes away the worrying about getting there and getting lost and having your own problems, because someone else is taking responsibility... There’s safety in numbers outdoors, that’s the way we look at it.”*

Male, aged 26-40, urban area

Having a negative experience while doing an activity could also affect confidence and the likelihood of doing it in future. This was most evident among cyclists, who reported that accidents on their bike, caused by poor road conditions, or near misses with traffic on the roads, had caused them to lose confidence in the activity and as a result they did it less often.

*“I’ve been [cycling] for 15 years or so. I was actually more of a cyclist back then than I am now. Over time, after a few injuries and falls, I have cut down and started to go hill walking more.”*

Male, aged 26-40, urban area

Confidence in doing outdoor activities had also been affected by the COVID-19 pandemic, particularly among some older participants and those with health conditions. These participants felt much more cautious about going outdoors at this time due to concerns about contracting the virus.

*“In the last two weeks the only reason I’m going out is to go to the shops. It’s not sensible to be going outside just now.”*

Female, aged 65+, urban area

### **Where to do an activity**

Another barrier to increased participation was a lack of knowledge of where to go to do an activity. Some participants, particularly those who were new to Scotland or to an activity, said that their knowledge of features like walking trails or cycle paths, or places to go for countryside or hill walks in their area, was limited and this could make it more difficult to get involved. Some minority ethnic participants thought that this was a particular barrier for people of their ethnic background, who they said had less experience of taking part in outdoor recreational activities.

*“Because of my walking group, we were given a map telling us where to go walking. But talking about somebody else [from a minority ethnic background] who doesn’t know the area, they wouldn’t know where to go, because they have never been there. Sometimes they will just take a short walk on the path and come back, because they don’t know the route or the area.”*

Female, aged 26-40, urban area

### **The benefits of doing an activity**

Participants from minority ethnic groups also suggested that a lack of knowledge about the benefits of outdoor activities among people of their ethnic group may be a barrier to participation. They noted that taking part in outdoor activities for leisure

and recreation was less common among older generations from their culture and so, historically, awareness of the benefits was low.

*“No one taught [my parents] the benefits of going out for a walk, what it does to your mind, the fitness benefits or of exploring what is really on your doorstep, you know, the beauty of Scotland. There are so many different places you can go and they didn’t realise they were there. I mean they came to Scotland [to earn] money to provide for their family, so it wasn’t the focus.”*

Male, aged 26-40, urban area

Awareness of the mental health benefits, in particular, was thought to be low among certain ethnic groups. This reflects the findings in Chapter 4 which highlighted that few participants started an activity for these benefits and instead realised them as a result of doing the activity.

*“People from [my country] need to know that walking and exercise is good for everybody. Not just if you want to look good or lose weight. It’s good for everything – your mind and body.”*

Female, aged 26-40, urban area

*“In [my country] we don’t have education about what is good about walking.”*

Male, aged 26-40, urban area

### **5.1.5 Physical ability**

The physical health and fitness of participants, and whether or not they felt they were physically able to do an activity, also affected how easy or difficult they found it to take part in outdoor activities.

Lower levels of physical fitness acted as a barrier to participation in more demanding activities, with participants who were less physically fit saying that they thought their current fitness levels precluded them from taking part in activities like running or hill walking. Others said that, if they stopped doing an activity as often, then it became difficult to restart as their fitness levels had dropped.

*“My friends are doing Munros but I’ve yet to join them. I need to get my fitness up first.”*

Male, aged 26-40, urban area

*“I stopped [cycling] for about a year I think it was, and when I started back up it was hard, especially the hills, you know ... If you don’t do it for a while you lose your speed and your stamina.”*

Male, aged 26-40, urban area

The presence of physical health conditions also acted as a barrier to participation in outdoor activities to varying degrees, depending on the nature and severity of the condition. Participants with conditions such as mild asthma said it could limit the extent to which they took part in activities, while participants with more debilitating conditions, such as knee or back injuries, were unable to take part in activities at all when their condition was at its worst.



*“Today I went for a walk with my friend. I suffered a bit with my breathing, but I need to keep pushing myself. ...Basically, if I didn't suffer [from asthma] from going out when it is wet and miserable, I would go out more.”*

*Female, aged 25-40, rural area  
(app diary phase)*

“It depends on how bad my leg is. If I do go out, I make sure there are seats because I can't walk far.”

Female, aged 65+, urban area

Similarly, there were older participants whose activities were restricted by the physical symptoms of old age, meaning they could not do an activity as often as they would like or could not take part in certain types of activities at all. Despite this, they were positive about continuing their participation in outdoor activities over the coming years, even if it meant adapting their activities in line with their ability.

*“I'd like to do more outdoors [over the next five years] but I think during that time either my wife or I is going to find it physically more difficult with the consequences of old age.”*

Male, aged 65+, rural area

## **5.2 External enabling factors and barriers**

Several external factors also acted as enablers or barriers to participation in outdoor activities. These include:

- easy access to good quality local green spaces
- physical infrastructure
- childhood experiences
- social norms
- cultural norms
- social connections and family
- information and support from other channels
- affordability, access to transport and equipment
- available leisure time
- weather and daylight
- lockdown restrictions due to the COVID-19 pandemic.

### **5.2.1 Easy access to good quality local green spaces**

The presence or absence of local, good quality outdoor spaces which were easy to access emerged as an important factor affecting participants' ability to engage in outdoor activities.

Good quality spaces were seen as having a number of features, including:

- being scenic, natural and green
- being litter-free
- being situated away from traffic and pollution, peaceful and not too crowded
- having varied features such as trees, open space, areas of water, plants and flowers
- supporting wildlife
- having the required infrastructure, appropriate to the type of space, to enable access, such as paths or parking
- being able to satisfy the differing needs of the group, in the case of a group visit (for example, bike-riding surfaces or playparks for children but also interesting walks for adults).

Both urban and rural participants were, on the whole, very positive about the quality of the outdoor spaces accessible to them. These positive feelings were also highlighted in the app diary exercise, where participants were asked to rate the quality of the green spaces they visited over the course of a two-week period, and scored them fairly highly. To illustrate:

*"I'm only three minutes away from open green space (...) it's just a space, a preserved area where there are a lot of trees and birds ... it's like a nature reserve just within the community, it's so fabulous. So, I take my kids there on bike rides on weekends and then we enjoy nature, we see the flowers and we see the birds singing, can even see the fish in water."*

Male, aged 41-64, urban area

For the most part, the presence of easy to access, good quality spaces acted as an enabler to participation in outdoor activities. However, there were those for whom a lack of such spaces was an issue and may have been a barrier to increased participation.

Dissatisfaction with local spaces emerged as more of an issue in more deprived areas. For example, one participant living in an SIMD 1 (most deprived) area reported not having anywhere immediately local where she felt she could take her children and dog safely, in part, she felt, because a number of green spaces had been used for housing developments.

In regard to the quality of local spaces, litter was perceived to be particularly off-putting, due to it detracting from the attractiveness of a space and effectively presenting a barrier to use of the location in extreme cases. For example, parents raised particular concerns about dangers presented by litter such as glass or needles or other hazardous refuse such as scrap metal:

*"We have some good outdoor spaces, we have a lot of wildlife which is great, but there are big drawbacks with dog mess and litter certainly for the parks and canal walks nearby to us. (...) People were magnet fishing and taking trollies and bits of car and all sorts out of the canal and then just leaving it at the side, which then meant you didn't want to walk near there because it's quite dangerous."*

Female, aged 26-40, urban area

This litter problem was also highlighted in the app diary exercise, with participants commenting that removing rubbish and/or providing bins were the chief improvements that could be made to the spaces they described.

### **5.2.2 Physical environment / infrastructure**

Participants explained how the physical infrastructure in outdoor spaces, such as paths, parking and facilities, had enabled or hindered their use of these spaces.

Many of the more frequent activities such as local walking, visiting playparks, running and cycling were carried out all year round, in designed and managed spaces such as parks. Participants identified a range of facilities that are important

to them when using a space. These facilities effectively act as enabling factors - and the absence of a certain facility can act as a barrier to use by some groups.

Hard paths were considered very important for winter conditions, for older people and those with walking difficulties, as well as for wheelchair use, and for families with prams and children cycling.

*“Quality to me would mean it would be quite clean, paths would be well maintained and accessible, especially if I'm taking my mother in a wheelchair. It is really hard if there aren't appropriate paths, so that's really important for us.”*

Female, aged 26-40, urban area

Benches were appreciated and a lack of them could act as a barrier for those who were less physically fit and older age groups. However, participants who were physically fit also valued seating as it provided a focus for a picnic, to take in the view and enjoy the environment, or as a spot to relax and chat while children were playing.

*“There is one bench and a whole adventure park... you can only stand for so long and you go ‘right, let's go and do something’, and you feel bad for the kids getting pulled away because you're bored of standing... so yes, it is just convenience things.”*

Male, aged 26-40, urban area

The provision of climbing and adventure areas within larger parks, as well as provision of smaller local swing parks, was important for households with children, enabling families to spend time outdoors together.



**“This local park is near my nephew's house. I take the three of them for a walk here when I'm visiting them each week. The park has a main footpath, with landscaped grass, plants and trees either side. It also has tennis courts, a children's play park and a small bird sanctuary. It is away from any main roads, so it is very peaceful.”**

**Female, aged 18-25, urban area  
(app diary phase)**

There was a perception, however, that finding free or low-cost spots for older children and teenagers to have fun, such as bike tracks or aerial assault courses, was more difficult, and that this age group was not as well served as younger

children. Parents described finding it challenging to encourage teenagers to participate in outdoor activities.

*“The [amenities at National Trust Scotland properties] are really good for kids ... but for those teenage years, my son nowadays doesn't see the point of going for a walk, it's just boring, what is the point of it?”*

Female, aged 41-64, rural area

Amenities such as toilets, bins and parking were also considered important in these types of spaces.

Physical infrastructure was also important when it came to outdoor spaces in more remote areas, such as hilly landscape, natural coastal areas or forest spaces, usually reached by car. Although there was a desire for these places to remain quiet, there was also an acknowledgement that a lack of parking and public transport could act as barriers to the use of such spaces. It was suggested that improvements to both could make these spaces more widely accessible.

*“Available parking is quite limited so it would be nice if additional parking spaces were created. (...) I never go on weekends because I know it will be impossible to park.”*

Female, aged 41-64, rural area

*“It's a rural space and probably is suited as that and doesn't need much improvement from an infrastructure standpoint (...). I think for others that can't drive - better public transport rural links.”*

Male, aged 26-40, urban area

Furthermore, while the desire was very much for nature to be at the fore in these spots, there was recognition that unobtrusive infrastructure such as bins in car parks, as well as potentially some path provision and the occasional bench, could aid access to, and management of, these types of area without spoiling them.

### **Activity-specific provision: cycling and sports facilities**

Good quality long cycling routes, safe local cycling routes and mountain biking spots were all felt to be important both in encouraging cycling generally and enabling cyclists to maintain participation.

There was a perception that there is room for improvement in provision in these areas, which could make it easier for people to enjoy cycling. Primarily for safety reasons, separate cycling infrastructure was preferred to shared cycle/car spaces, particularly by families. Other European countries were perceived to have a more developed infrastructure for cycling, which allows it to flourish:

*“It would be much better if there was a cycle path ... having travelled to Austria a lot - and they cycle everywhere - there are amazing cycle paths and it's a real way of getting children, in particular, outside cycling. But [here] they are on roads and it's not as safe, you've got traffic to deal with and contend with, so I think if you had cycle ways it would really encourage a lot and promote a lot of people to exercise.”*

Female, aged 41-64, urban area

With regard to outdoor facilities for other sports, the quality and availability of these were also perceived as major factors affecting participation. Participants who reported using such facilities tended to be younger men, with examples including fitness equipment, football pitches and multi-sport outdoor ‘cages’ (used in this case for roller-hockey). Factors such as poor quality pitch surfaces and limited availability of pitches that require booking were mentioned as barriers to use.

The photo below shows a participant using equipment which had recently been installed at his local park. He felt that this equipment had helped to improve the park overall, and having the equipment available locally to him helped motivate him to go out and exercise, even when the weather was bad.



*“Today's weather has [been poor] but I wanted to go out to exercise. Had it not been for the park near my house, which is equipped with some sports equipment, I would not have been able to do anything today.”*

Male, aged 26-40, urban area  
(app diary phase)

### 5.2.3 Childhood experiences

Participants’ childhood experiences of outdoor recreation and cultural background both played a key role in their beliefs about and participation in outdoor activities.

Childhood factors were considered very important in establishing behaviours - growing up in a household where the family participated in outdoor activities was instrumental in establishing routines, and developing ability and confidence, that continued into adulthood. Participants described how they had continued family traditions that they had experienced in childhood once when they had their own children:

*“My mum took us [to Ayr beach] when I was wee, I just started doing that with [my children].”*

Female, aged 26-40, urban area

Groups such as the Scouts were mentioned as a further source of outdoor education and participation. Participants who had lived in rural areas in childhood also credited this with encouraging their participation in outdoor activities from an early age:

*“I was constantly out playing with my friends when I was little, I used to live up in the middle of nowhere, so the only way to get out anywhere or to do anything was to go for walks, because there was nowt else to do.”*

Female, aged 26-40, rural area

#### **5.2.4 Social norms**

Social norms in participants' current environments were also very influential. Going for walks, on outings and on summer beach trips were all perceived as established and widely shared social norms. Seeing this type of participation in their social sphere, whether in their local community, in their friendship group or on social media, could have a positive effect on motivation and confidence as well as offering information and inspiration on places to go and groups that exist.

#### **5.2.5 Cultural norms**

Some minority ethnic participants, however, perceived that outdoor activities were not a traditional part of their culture and felt this had had a bearing on their own approach to outdoor activities. Multiple factors were given for this lack of participation in outdoor activities, including: outdoor exercise not being part of the culture in the places their family had originally come from; a focus on education and working rather than leisure activities; a high proportion of business owners, working long hours; a cultural focus on indoor family and community socialising; resistance, particularly from older community members, to getting involved in outdoor activities; a lack of knowledge about the impact of a more sedentary lifestyle on health, both physical and mental; a lack of knowledge about the available activities and scenic places to visit in Scotland; and not seeing others in their community doing outdoor activities.

Those participants who cited these cultural barriers had started participating in outdoor activities as adults, primarily through the support and education offered by community groups and health professionals – although there were also those who had been encouraged by friends who had recently taken up outdoor activities. Minority ethnic participants talked about the influence such groups could have, even on the older members of their communities.

*“I think the last couple of years people are more and more aware and along with Boots and Beards [a walking group for Asian men] (...) there is another group called Step Out Scotland and their main focus was actually getting older people and families out. So, getting into people’s mindset that you can actually go out and enjoy, even in your older age, out walking.”*

Male, 41-64, urban area (app diary phase)

It was also noted that, if the group was not specifically for people from their community background, the association between outdoor activities and alcohol could act as a barrier, for example if groups ended an outing with a trip to a pub.

*“They know that if they go with a different group [than Boots and Beards] they might not align on culture traditions and simple things, like maybe for example, in our religion no drinking and stuff. One or two have been on different groups and they are like, you know, when they go up, there is like alcohol and that involved, so that I think made a few members a bit edgy”.*

Male, aged 26-40, urban area

### **5.2.6 Social connections and family**

There were participants for whom social contact was a key motivating factor for starting and/or maintaining participation in outdoor activities. Even when social motivations were not the key reason for undertaking an activity, however, the presence or absence of others with whom to do an activity acted as an enabler or barrier to participation.

Having a friend, friendship group or family member to do something with was mentioned as an important factor in starting or maintaining a particular activity, providing people with information, confidence and support that they might not otherwise have had. This was particularly helpful for participation in new or niche activities, when familiarity and confidence were lower, such as Munro bagging, wild swimming or surfing.

It can also be a barrier or limiting factor to outdoor activity when friends or family members are not available. For example, one participant explained that she had found it more difficult to find a friend to walk with during lockdown and this had negatively affected her motivation:

*“When I go alone, I don’t walk as much as I used to walk with my friends. When we are all together we are encouraging each other: ‘okay, let’s walk more fast and then from here to there let’s give a wee run’. But when I’m on my own doing 45 minutes I’m like ‘oh, let’s go back home’ because you have nobody next to you and you start feeling bored.”*

Female, aged 26-40, urban area

Having a social commitment to play a sport, such as tennis, had helped to motivate participants on occasions when they personally were feeling less motivated. There were also participants who reported being more motivated to commit to and achieve a challenge or goal when they did it with others.



***“Playing social tennis is something I really enjoy. I would have preferred it a bit warmer but it was freezing cold today... I didn’t even consider cancelling though as I’d have been letting down my friend.”***

**Female, aged 41-64, urban area (app diary phase)**

Activity-centred groups or social groups also positively affected participation. Some provided support in the form of organisational and practical help, for example research, planning and transport. Groups could also help by building participants’ knowledge and confidence, thereby making it easier to overcome barriers and participate. The different types of groups mentioned included: walking groups, cycling groups, wild swimming groups; social groups, such as church groups and community groups, organising different activities and outings; outdoor exercise groups, yoga classes and ‘boot camps’; and social media groups with shared interests who organise meet-ups or team games.

Being part of a group also made it easier for participants to find someone of a similar ability to them to exercise with.

*“We have got a cycling [WhatsApp] group that I have joined (...), I mean these guys are more hard-core, they are doing maybe 100 miles a week but they have different levels. What kind of helps is they are from the same community so you know everyone, you know everyone’s fitness ability, and you’re like ‘Okay I can tag along with this guy’ so that helps, for sure.”*

**Male, aged 26-40, urban area**

Participants from minority ethnic backgrounds explained how groups have been particularly important over the last few years to their experience of taking part in outdoor activities. Groups provided additional reassurance and support where confidence and lack of familiarity with an activity were particular barriers. To illustrate:

*“Me and my wife fell towards the back because she is a bit of a slow walker, she is able but she is slow. We eventually got cut off, and I realised everybody was a way ahead of us. Normally you would have worried at that point. I thought: ‘look, don’t worry, carry on walking, because we are in a group’ (...) If you go in a large group and it is arranged then it takes a massive worry off your head.”*

Male, aged 41-64, urban area

## **Family and household situation**

Living with other adults could be an important enabling factor particularly for the elderly, those with health issues and those who did not drive. For example, there were those who relied on their partner or spouse to drive them to a place they could walk and be there to help them if required during the activity.

While children were a motivating driver for participation in some activity types (as discussed in Chapter 4), the presence of young children in the household could also act as a barrier to parents getting out alone for outdoor activities, particularly those that were more strenuous. For example, one male participant with very young children talked about looking forward to doing some hill-walking when his toddlers were older. Lone parents were particularly constrained in their ability to participate in activities without their children.

### **5.2.7 Information and support from other channels**

In addition to the support provided by family members, friends and activity groups, other channels of information and support were important enablers to participation.

Being able to access information about places to go and about potential activities was perceived to be a key enabler. Sources of information and support mentioned as being useful by participants included: seeing images and recommendations on social media (less used by older groups); specific websites (e.g. Walkhighlands); newspaper features suggesting walking routes (more used by older groups); apps such as Strava and Ordnance Survey; and leaflets (e.g. from Tourist Information offices).

Lack of access to information sources could act as a barrier to use of a greater variety of spaces or activities. For example, there were participants who wanted to find new places to go or cycle paths to use with their children but felt this information was difficult to find.

Activity challenges or programmes were also an enabling factor. Participants described how they had got involved in various challenges which they had heard about through social media or word of mouth, such as the ‘Couch to 5k’ running app, Munro bagging, step challenges, biathlons and the ‘NC500’ (North Coast 500) route around the north of Scotland. Some of these activities were being organised as charity events, adding an extra dimension and reason for participation.

These types of programmes and challenges acted as enablers by providing a supportive and motivating framework, giving information, advice, and easy-to-follow instructions. Step-by-step guidance on how to proceed over a period of time was helpful to users in maintaining, as well as starting, an activity. These activity ‘packages’ were perceived largely as fitness-based, and some as social media-

centred, and consequently had less awareness and appeal among older groups and those with a disability or long-term health condition.

Health professionals were also an important source of information. Although the mental and physical health benefits of outdoor activities were fairly widely known, there were those (particularly minority ethnic participants) who had only recently become aware of them, through GPs or other health professionals encouraging them to start or increase their participation. A lack of information prior to this may have acted as a barrier. Even some participants who were already aware of the health benefits of outdoor activities reported being prompted to start following advice from their GP.

### **5.2.8 Affordability, access to transport and equipment**

Being able to afford to take part in an activity, having transport available to access it and being able to afford and store equipment are closely interrelated factors which could all enable or limit participation. These were barriers for participants living in more deprived areas in particular.

Participants' own financial situations, combined with the affordability of an activity, impacted on their ability to participate in different types of activities, and the frequency with which they did so. While the easy affordability of local walking, for example, enabled wide access, the additional costs of other activities presented barriers to participants who were less financially secure. Costs identified included: travel and subsistence costs, and accommodation costs for longer trips; entrance costs to public attractions; specialised clothing and footwear; equipment purchase or hire, maintenance and potentially storage; costs associated with learning a skill, such as a course of lessons; fees for clubs, exercise classes and personal training; and subscription fees, for example to a fitness app or an activity-specific association.

Those who had the financial means to invest in a number of activities described how being able to afford the necessary equipment, subscriptions for apps and travel to events enabled them to engage in the activities to a greater degree.

Conversely, affordability acted as a barrier to participants who did not have the financial means available to do what they would like. Examples included families – and single parents in particular – who were restricted by finances in the number of summer day trips they took and participants who wanted to take up cycling (again) but were not able to afford a bike.

Having easy access to transport emerged as a crucial enabling factor for participation in a range of activities. It facilitated quick access to fairly local scenic walking areas, sightseeing or holiday trips further afield, and activities only undertaken in specific locations, such as golf or snowboarding.

While car owners had the means to easily travel to their desired places, those who were unable to drive or did not currently own cars found it more difficult. They found themselves reliant either on others to transport them, or on public transport or car hire. Participants with mobility issues who could not walk far or were not confident

using public transport were particularly affected by a lack of transport and relied on others to take them places.

Furthermore, the combination of a lack of access to transport and to funds for travel costs was particularly problematic for participants living in more deprived areas, who consequently felt that activities requiring travel were less accessible to them.

The requirement for equipment for activities created further barriers, not only in the form of costs but also in relation to preparation, maintenance, storage and transport considerations. Such barriers included: not having the space to store a bike; the hassle of taking bikes up and down stairs when you live in a flat; and difficulty transporting specialist equipment.



One participant had come across a solution to the bike storage problem, in the form of a local bike-loan programme in her community:

*“I don’t know if it is the council or some organisation... they have the bikes in the container, they run a project, so you just go there and tell them ‘hi, I’m here’... you go away to Helix or here and there for an hour or so and then come back, give them back the bike. They did offer me to take it home, but obviously I’m in a flat so I don’t have any place to keep it.”*

Female, aged 26-40, urban area

### **5.2.9 Available leisure time**

A further enabler or barrier to pursuing outdoor activities was the amount of free time participants had available. Long working hours were the main barrier, with having children at home to care for being an additional issue, particularly for working single parents, and also for parents homeschooling during the pandemic. Those who were retired, on the other hand, tended to have the most time available and this acted as an enabler to their participation.

### **5.2.10 Weather and daylight**

Good weather and daylight increased participants’ desire to be outdoors. The impact of poor weather conditions varied – some reported going out in all weathers,

others went out in different weathers but found it easier to motivate themselves in better weather, while others considered themselves to be 'fair weather' types and limited their participation to better weather. Reduced daylight in winter was a particular issue for those working full-time, with participants feeling restricted more to weekend activities.

*"At this point in time [December] during the weeks... it's not often we get out for walks because round about local areas here it is quite dark with the short days just now. Parks obviously - not very enjoyable and probably not the safest place at night time either.*

Male, aged 41-64, urban area

Extreme cold and difficult conditions underfoot were particularly off-putting for older and less mobile participants and those with very young children. The effects of this ranged from visiting alternative places in order to avoid muddy areas and stick to paved paths to not going out at all in certain conditions.

The weather also acted as a barrier for participants with health conditions that could be aggravated by certain weather conditions. To illustrate:

*"I'm asthmatic so it does ... have a bit of an effect, ... it makes my chest even tighter, so when it is cold and damp outside, I try and avoid it."*

Female, aged 26-40, urban area

### **5.2.11 Impact of lockdown restrictions due to the COVID-19 pandemic**

As highlighted throughout this report, lockdown restrictions have had varying impacts on different groups. Below is a summary of the ways in which the situation has acted both as a barrier to participation and as an enabler.

#### **As a barrier**

Participants have:

- stayed indoors more, due to concern about the risks of going out and desire to follow government guidance (particularly older participants, those with a disability or long-term health condition, minority ethnic groups, and those who are more anxious)
- been unable to take part in certain activity types: for example, group activities, team sports and those not undertaken locally (particularly a problem for those who regularly enjoy these types of activity)
- avoided certain local places made busier by the pandemic (more of a problem for those living near attractive spots and in high density areas)
- had less free time due to increased work (for example where the individual's industry is busier as a result of the pandemic) and pressures of home-schooling
- had operations and health investigations delayed, for conditions that interfere with outdoor activities (such as those with knee problems or asthma).

## **As an enabler**

Participants have:

- had increased time for outdoor activities (for example furloughed workers)
- had more flexibility to go out during daylight, and also to choose a 'weather window' for a walk or other activity (those working from home)
- increased outdoor activity due to the lack of alternative options of other things to do and of indoor exercise, and the focus on exercise as an 'essential purpose' for being out of the house
- increased outdoor activity as the only way to have face-to-face contact with friends (particularly those less anxious about social contact).

As discussed further in the recommendations section that follows, there is potential to build on the positive changes the pandemic situation has brought about.

## 6. Guiding principles for sustaining positive behaviours and widening participation

This section pulls together the research findings to address the following objectives:

- utilise this understanding to make recommendations on how any positive changes in behaviour and attitudes can be sustained over the long-term, and
- highlight opportunities to widen participation among lower participation groups.

There are many factors influencing an individual's participation in outdoor activities in Scotland – and these factors are often very specific to that person's personal situation. There are also differing motivations, enablers and barriers for different activities. For example, relatively few barriers to recreational walking were identified whereas other activities such as cycling, hillwalking and running were less widely undertaken for a number of reasons. The behavioural influences on participation in outdoor activities in Scotland are, therefore, multifaceted and cover several behavioural dimensions.

Using behaviour change models to devise specific, detailed, recommendations works best when the behaviour in question is also very specific - a relevant example here could be an attempt to increase recreational walking in Scotland. In the current study, however, the aims are very broad. We are looking to behaviour change theory to help us make recommendations to sustain participation in a number of different activities and across different population groups – and, as discussed above, the influencing factors are wide-ranging across both of these.

For these reasons, this section takes a more holistic approach, recognising that there will not be a single intervention – or even a small number of interventions – that will achieve the aims. Instead of providing detailed recommendations, what follows is a series of guiding principles, underpinned by the behavioural influences identified in the research, which should be adhered to when designing any future interventions. These principles are based on analysis of the research findings using the MAPPS behaviour change framework and are not a definitive list. Of course, these principles are linked and should not be considered in isolation but rather in a co-ordinated way whereby more than one principle may be incorporated into a single intervention, if appropriate. Thinking in terms of behaviour change programmes rather than single intervention activities means that it is possible to create a 'virtuous spiral' of improved behaviours, with simple behaviour changes in one area leading to something more significant and holistic.

A further consideration in setting out these guiding principles is a greater focus in this study on the enabling factors at play than would be typical in behaviour change research. The research was with people who were already undertaking the desired behaviour - rather than with those who were not - and sought to understand the main drivers of their participation. While, of course, barriers were identified and have been considered, the guiding principles below have been primarily informed

by what *is* already working for people – and is therefore likely to continue to work for them (and others). Each guiding principle is an example of something that has enabled – or is likely to enable – sustained and/or wider participation in outdoor activities.

The MAPPS behaviour change framework sets out the five key dimensions that are important for behaviour change: Motivational ('do I want to do it?'), Ability ('am I able to do it?'), Processing ('how do I think about it?'), Physical ('does the context encourage it?') and Social ('what do other people do and value?'). For this research we have used MAPPS for diagnosis, providing a rigorous understanding of the mechanisms underlying the behaviours of interest (those relating to participation in outdoor activities in Scotland).

We have grouped the guiding principles under the primary MAPPS dimension to which they relate<sup>15</sup>:

- Motivational;
- Ability;
- Physical; and
- Social.

The Processing dimension, which refers to how mental shortcuts, biases and behavioural regulation guide decisions and behaviour, cuts across all of these).

Within each principle, we lead with the principle itself and then go on to use MAPPS to describe why it is working i.e. what are the behavioural dimensions and building blocks leading to this. This provides a means to identify how the guiding principle is operating, which can be used to inform future intervention development. We then give an example from the research of the guiding principle playing out in practice. Where a guiding principle particularly relates to a lower participation group, this is noted.

Given the research was qualitative in nature and was not measuring the prevalence of enablers or barriers, we have not assigned any relative importance to the guiding principles.

Table 2 summarises the guiding principles and how these relate to the MAPPS behaviour change framework. Each principle is then discussed in more detail in turn.

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<sup>15</sup> Where a guiding principle relates to factors across multiple behavioural dimensions, we have grouped it under to the one to which it is most strongly aligned.

**Table 2. Summary of guiding principles for future intervention design**

MAPPS DIMENSION	KEY QUESTION	GUIDING PRINCIPLE
Motivation	Do people want to do the behaviour?	1.1: Health professionals play an important role in prescribing outdoor exercise – particularly for minority ethnic groups where the benefits are not as well known
		1.2: There may be scope to further advocate the mental health benefits of outdoor activities – these play a key role in sustaining participation but are not currently a main driver to starting activities
		1.3: Strengthening the sense of identity people feel with an activity can help sustain and deepen participation
		1.4: In designing interventions to encourage families to take part in outdoor recreation, there is scope to build on the view that doing outdoor activities with children is part of being a ‘good parent’
		1.5: Challenges and goals (e.g. walking 10,000 steps a day, running a 10k) act as useful ways of sustaining motivation. The use of technology, such as apps and fitness watches, can support these goals
Ability	Are people able to do the behaviour?	2.1: There is a role for greater information provision and communication of the benefits of outdoor activities, particularly among minority ethnic groups
		2.2: Emphasise the range of activities that can be enjoyed, including by people who are less physically mobile
		2.3: Childhood experiences can strongly influence sustained participation in outdoor activities in adulthood
		2.4: Encouraging the development of new or adapted routines can help to build motivation for participation in outdoor recreation

Physical	Does the context encourage the behaviour?	3.1: Availability of good quality, easy to access local spaces helps to facilitate regular participation, while a lack of these can be a barrier in more deprived areas
		3.2: The physical infrastructure and maintenance of outdoor spaces affects their accessibility, appeal and usage
		3.3: Improvements to cycling infrastructure, and ways to help people build their cycling confidence and manage challenging cycling situations, may address some of the barriers to this activity
		3.4: Available resources (financial, transport, equipment) affect both the range of activities people can do and the extent to which they can engage with them
		3.5: The role played by life stage and personal and family circumstances should be borne in mind when considering opportunities to encourage participation. For example, parenthood/ retirement
Social	What do other people do and value, that may act either as an enabler or a barrier to doing the behaviour?	4.1: Activity groups and organised trips can help both to initiate and to sustain participation
		4.2: More informal social meetings for outdoor activities can also help to initiate and sustain participation
		4.3: Cultural norms strongly influence knowledge, attitudes and behaviours, acting as both an enabler and a barrier

## 6.1. Motivational ('do I want to do it?')

**Guiding principle 1.1: Health professionals play an important role in prescribing outdoor exercise – particularly for minority ethnic groups where the benefits are not as well known.**

Behavioural dimensions involved:

- **Outcome expectation** – desire to improve health/fitness
- **Self-efficacy** – health professionals can act as a facilitator of self-efficacy by helping people feel able to do it
- **Capability** – lack of knowledge of benefits

Building blocks that can be used to develop interventions:

- **Build understanding** (of the benefits of outdoor activities, helping people see the relevance and importance to them)
- **Feedback** (positive benefits of the activity are experienced, and feedback and encouragement provided)
- **Connect** (allowing connections to be formed or making these available as informational sources)

Example of how this has worked in practice:

A participant had been advised by their GP that they needed to lose weight or risk becoming diabetic. This acted as a trigger to begin outdoor exercise. Experiencing the physical benefits motivated them to keep going.

Feedback and encouragement from the GP on the participant's weight loss and associated diabetes risk could further motivate this person to sustain their participation in outdoor recreation.

**Guiding principle 1.2: There may be scope to further advocate the mental health benefits of outdoor activities – these play a key role in sustaining participation but are not currently a main driver to starting activities.**

It is unclear whether this is simply because these benefits are less well known or whether they need to be personally experienced to become a significant motivator.

Behavioural dimensions involved:

- **Outcome expectation** – desire to maintain improvements experienced
- **Emotion** – enhancing the positive emotions experienced
- **Capability** – lack of knowledge of benefits prior to starting outdoor activities

Building blocks that can be used to develop interventions:

- **Build understanding** (of the benefits of outdoor activities, helping people see the relevance and importance to them)
- **Feedback** (positive benefits of the activity are experienced, and feedback and encouragement provided)

Example of how this has worked in practice:

A participant wanted to lose weight and decided to start running. She downloaded the Couch to 5k running app to get herself started. She found that she didn't enjoy running but did enjoy walking. She reached her target weight. However, she continued regular walking as she found that it helped her feel better mentally. When walking, she put music on and enjoyed not thinking about anything for a while.

The positive effects on her wellbeing became particularly apparent when she couldn't walk for a few months due to an ankle injury - she felt more anxious and wasn't sleeping as well.

**Guiding principle 1.3: Strengthening the sense of identity people feel with an activity can help sustain and deepen participation.**

Behavioural dimensions involved:

- **Identity** – aligning activities with a salient personal identity
- **Emotion** – feelings of pride and self-worth due to the level of participation in the activity

Building blocks that can be used to develop interventions:

- **Build understanding** (of the benefits of outdoor activities, helping people see the relevance and importance to them)
- **Feedback** (positive benefits of the activity are experienced, and feedback and encouragement provided)
- **Connect** (allowing connections to be formed or making these available as informational sources)

Example of how this has worked in practice:

A participant had been a keen hillwalker and runner for a number of years. Because of this she identified as an 'outdoorsy' person. She also had a strong identity of being a 'bubbly' person and felt that her outdoor exercise contributed to this, helping her to remain upbeat.

She felt that others also viewed her in this way, and this helped motivate her to keep hillwalking and running.

**Guiding principle 1.4: In designing interventions to encourage families to take part in outdoor recreation, there is scope to build on the view that doing outdoor activities with children is part of being a ‘good parent’.**

Behavioural dimensions involved:

- **Identity** – part of being a ‘good parent’
- **Emotion** – importance and enjoyment of family time
- **Capability** – knowledge of the benefits to children
- **Social** – ‘good parents’ do outdoor activities with their children

Building blocks that can be used to develop interventions:

- **Build understanding** (of the benefits of outdoor activities, helping people see the relevance and importance to them)
- **Feedback** (positive benefits of the activity are experienced, and feedback and encouragement provided)
- **Connect** (allowing connections to be formed or making these available as informational sources)

Example of how this has worked in practice:

A lone parent with a health condition which limited her physical ability felt strongly that this should not prevent her child from being active outdoors. She knew this was important for her child and that the time together would also be good for their relationship. She pushed herself to get outdoors with him and felt they both enjoyed and benefited from their time spent being active outdoors.

**Guiding principle 1.5: Challenges and goals (e.g. walking 10,000 steps a day, running a 10k) act as useful ways of sustaining motivation. The use of technology, such as apps and fitness watches, can support these goals.**

Behavioural dimensions involved:

- **Self-efficacy** – provide opportunities to build confidence and mastery by allowing for gradual learning of skills
- **Internalisation** – help people set personally-relevant goals and participate in meaningful challenges

Building blocks that can be used to develop interventions:

- **Build understanding** (of the benefits of outdoor activities, helping people see the relevance and importance to them)
- **Feedback** (positive benefits of the activity are experienced, and feedback and encouragement provided)
- **Connect** (allowing connections to be formed or making these available as informational sources)

Example of how this has worked in practice:

To sustain her motivation to exercise regularly, a parent put aside an hour a day for exercise and her goal was to walk 10,000 steps every day. She tracked her activity using her watch.

## 6.2. Ability ('am I able to do it?')

**Guiding principle 2.1: There is a role for greater information provision and communication of the benefits of outdoor activities, particularly among minority ethnic groups.**

Behavioural dimensions involved:

- **Capability** – lack of knowledge of a range of activities, where to do them and the benefits

Building blocks that can be used to develop interventions:

- **Build understanding** (of the benefits of outdoor activities, helping people see the relevance and importance to them)
- **Feedback** (positive benefits of the activity are experienced, and feedback and encouragement provided)

Example of how this has worked in practice:

One participant from a minority ethnic group described a lack of knowledge of the benefits of outdoor activities within her community. She also felt that members of her community, who did want to take up outdoor activities, would not know where to go or be aware of the options available to them. Personally, she had experienced the benefits of walking and expanded her knowledge of places to go through her walking group.

**Guiding principle 2.2: Emphasise the range of activities that can be enjoyed, including by people who are less physically mobile.**

Behavioural dimensions involved:

- **Capability** – knowledge of a range of activities and the benefits, physical ability to participate
- **Emotion** – allowing for enjoyment to be experienced across a range of different participation levels

Building blocks that can be used to develop interventions:

- **Build understanding** (of the benefits of outdoor activities, helping people see the relevance and importance to them)
- **Feedback** (positive benefits of the activity are experienced, and feedback and encouragement provided)

Example of how this has worked in practice:

A retired participant was no longer able to walk far as a result of knee problems. Instead, she visited parks with others, who were able to help her get there. On these visits she had a short walk, before sitting and chatting to her companion. Although she was constrained in what she could do, she still really enjoyed her outings and felt she benefited mentally.

### **Guiding principle 2.3: Childhood experiences can strongly influence sustained participation in outdoor activities in adulthood.**

Behavioural dimensions involved:

- **Routines** – habits formed in childhood become embedded and the behaviours continue into adulthood

Building blocks that can be used to develop interventions:

- **Feedback** (positive benefits of the activity are experienced, and feedback and encouragement provided)
- **Planning** (new skills and intentions to take part in an activity are developed and maintained)

Example of how this has worked in practice:

A young participant who was highly active and regularly walked, cycled and played golf talked about having done these activities with her parents and grandparents when she was growing up. She described them as a very active family and credits them with her love for outdoor activities.

**Guiding principle 2.4: Encouraging the development of new or adapted routines can help to build motivation for participation in outdoor recreation.**

Behavioural dimensions involved:

- **Routines** – making an activity part of a daily/weekly routine
- **Self-efficacy** – experience enacting behaviours through routines can help build confidence and sense of mastery
- **Internalisation** – routines can reflect commitment to others making more personally meaningful

Building blocks that can be used to develop interventions:

- **Feedback** (positive benefits of the activity are experienced, and feedback and encouragement provided)
- **Planning** (new skills and intentions to take part in an activity are developed and maintained)

Example of how this has worked in practice:

A participant who had moved to working at home during the pandemic had increased his participation in outdoor activities as he had started to go for lunchtime walks - and this quickly became part of his daily routine.

### 6.3. Physical ('does the context encourage it?')

**Guiding principle 3.1: Availability of good quality, easy to access local spaces helps to facilitate regular participation, while a lack of these can be a barrier in more deprived areas.**

Behavioural dimensions involved:

- **Environmental factors** – quality of spaces, proximity to home

Building blocks that can be used to develop interventions:

- **Restructuring** (changing environment to enhance or remove influences)

Example of how this has worked in practice:

A single parent living in a deprived area felt there was a lack of suitable places locally to take her children, describing the parks as vandalised and full of litter. As a result, she would not go to any of the local parks and chose to drive to ones further afield instead.

**Guiding principle 3.2: The physical infrastructure and maintenance of outdoor spaces affects their accessibility, appeal and usage.**

Behavioural dimensions involved:

- **Environmental factors** – accessibility, infrastructure and maintenance of places

Building blocks that can be used to develop interventions:

- **Restructuring** (changing environment to enhance or remove influences)

Example of how this has worked in practice:

A participant described the many positive features of a space that led to her visiting it weekly with her nephews – away from busy roads (peaceful), having a mix of hard paths, landscaped grass, trees and plants as well as a playpark, tennis courts and a bird sanctuary. A small improvement she would like to see is a greater number of benches.

**Guiding principle 3.3: Improvements to cycling infrastructure, and ways to help people build their cycling confidence and manage challenging cycling situations, may address some of the barriers to this activity.**

Behavioural dimensions involved:

- **Environmental factors** – concerns about the safety of cycling on roads, particularly with children
- **Self-efficacy** – lack of confidence in cycling abilities

Building blocks that can be used to develop interventions:

- **Understanding** (providing people with opportunities to develop their cycling abilities in safe spaces)
- **Feedback** (ensuring cycling is a positive experience, reducing negative emotions, or helping people manage these)
- **Restructuring** (changing environment to enhance or remove influences)
- **Connect** (facilitating learning from others to identify safe routes and cycling practices)

Example of how this has worked in practice:

A minority ethnic participant who had not cycled in childhood had heard that cycling was a good form of exercise and wanted to take it up. She was able to do this through a local authority scheme which provided both lessons and bike rental. She wanted to continue cycling but her course had been put on hold due to COVID-19 restrictions and she hadn't had use of a bike.

**Guiding principle 3.4: Available resources (financial, transport, equipment) affect both the range of activities people can do and the extent to which they can engage with them.**

Behavioural dimensions involved:

- **Environmental factors** – personal resources

Building blocks that can be used to develop interventions:

- **Restructuring** (provide opportunities to share resources so that participation isn't reliant on personal means)

Example of how this has worked in practice:

A participant, who was not currently working, did not have a car and felt this restricted him to walking close to home. He would like to engage in mountain biking and camping in the future but he wasn't able to afford the equipment.

Interventions such as equipment rental schemes and organised groups may be ways of facilitating these activities.

**Guiding principle 3.5: The role played by life stage and personal and family circumstances should be borne in mind when considering opportunities to encourage participation. For example, parents typically have a focus on activities they can do with their children and retirement can present an opportunity for instigating or renewing participation in outdoors activities.**

Behavioural dimensions involved:

- **Environmental** – leisure time available to participate in outdoor activities
- **Social** – caring responsibilities create constraints on what activities people can participate in
- **Capability** – abilities and skills change across life stages, influencing what activities people can participate in

Building blocks that can be used to develop interventions:

- **Build understanding** (of the benefits of outdoor activities, helping people see the relevance and importance to them)
- **Feedback** (positive benefits of the activity are experienced, and feedback and encouragement provided)
- **Restructure** (identify moments of changing environmental influences to align activities with these)
- **Connect** (help people form connections with others at similar life stages to provide learning opportunities)

Example of how this has worked in practice:

A participant took up walking when he retired. He suddenly found he had a lot more spare time and also realised how important this was for his health in later life. He walked five times a week, mostly with his wife and felt it had benefitted him in several ways – he had lost weight, felt better mentally, enjoyed the time with his wife and enjoyed the nature, scenery and fresh air.

## 6.4. Social ('what do other people do and value?')

**Guiding principle 4.1: Activity groups and organised trips can help both to initiate and to sustain participation.**

Behavioural dimensions involved:

- **Social norms** – group creates and reinforces normative expectations and behaviours, these can further build:
- **Identity** – identifying as being part of a group helps motivation
- **Self-efficacy** – confidence increased through being with others/learning from others
- **Ability** – social group supports learning new skills, finding places to visit
- **Routines** – regular activities organised by groups can become part of a routine
- **Physical environment** – can provide transport (and therefore access to further afield places), planning/organisational help.

Building blocks that can be used to develop interventions:

- **Understanding** (social learning can be supported, making learning relevant and experiential)
- **Feedback** (guidance can be provided as part of the group experience)
- **Planning** (responsibility for planning becomes part of the group, so less of an individual responsibility)
- **Restructure** (individual can benefit from resources of the group)
- **Connect** (group connections support learning and reinforce normative behaviours)

Example of how this has worked in practice:

A retired minority ethnic participant had concerns about his health and wanted to be fitter. He had not taken part in many outdoor activities when he was working as: this wasn't something that was typically done in his culture; he hadn't realised Scotland had so much to offer in terms of scenery; and he had little time available for leisure activities when he was working.

He had seen a friend's photos on social media of him hillwalking with an Asian men's group. He thought it looked fun and asked him if he could join. He tried it and really enjoyed it and has since been on a number of trips with both this group and a group not exclusively for people of his ethnicity.

Since taking up walking, he had felt better both physically and mentally. He hoped the hill walking groups would restart once lockdown restrictions eased as they brought the added benefits of social interaction, satisfaction of climbing a hill, and seeing the more scenic, remote parts of Scotland. He was determined to keep walking as long as he was physically able and hoped to reverse his diabetes.

**Guiding principle 4.2: More informal social meetings for outdoor activities can also help to initiate and sustain participation.**

Behavioural dimensions involved:

- **Social norms: meetings with close social connections** can help to build and reinforce behaviours, this can be further supported by:
- **Outcome expectation – experience social benefits**
- **Emotion – enhance enjoyment of the activity**
- **Routine – having a commitment to meeting someone**

Building blocks that can be used to develop interventions:

- **Connect** (allowing connections to be formed or making these available as informational sources)
- **Understanding** (learning and experiencing the additional social benefits that accompany doing activities with others)
- **Feedback** (positive experience of social enjoyment can bolster the enjoyment of the activity)
- **Planning** (commitment to others can help to develop and maintain intentions to enact the activities)

**Example of how this has worked in practice:** A retired participant, who lived alone, played golf with friends three times a week. While he enjoyed the activity itself, and knew that keeping active was important, the social interaction was his main reason for doing it.

**Guiding principle 4.3: Cultural norms strongly influence knowledge, attitudes and behaviours, acting as both an enabler and a barrier.**

Behavioural dimensions involved:

- **Cultural** – values and behaviours shaped by the role of outdoor activities in wider culture

Building blocks that can be used to develop interventions:

- **Connect** (allowing connections to be formed or making these available as informational sources)

**Example of how this has worked in practice:** positive associations with the outdoors and awareness of the ways in which it is used for outdoor activities were normalised in Scottish culture. However, this was not always the case for participants from other cultures. One participant from a minority ethnic group described how outdoor activities were not something her parents' generation participated in.

# Annex 1: In-depth interview discussion guide

## 1. Introduction

- Introduce self and Ipsos MORI
- Introduce the research: This research has been commissioned by the Scottish Government and also involves input from NatureScot, which was formerly known as Scottish Natural Heritage, and is the public body responsible for protecting and promoting Scotland's natural heritage. The purpose of the research is to find out more about why people in Scotland take part in different types of outdoor leisure and recreation activities.
- Explain that the interview will last around 45 minutes and we will give the participant £30 as a thank you for taking part (we can do this as a BACS transfer or an Amazon or high street voucher)
- Provide reassurances of anonymity and confidentiality. Explain that no identifying information about individuals will be used in the reporting of the research.

Explain that participation in the research is entirely voluntary and if, at any time during or after the interview, they decide they no longer wish to take part, they can withdraw from the research and have their data deleted.

- Explain that we hold personal data (like email address and phone number) securely and will not share it with anyone. The data we collect during the research will be securely deleted from our systems 3 months after the report is published
- Our privacy notice that outlines more about how we use and store people's data, which we can resend if they haven't read it already.
- No right or wrong answers, just keen to hear their experiences of using the outdoors.
- Request permission to record interview.

## 2. Warm-up and lifestyle

To start us off, can you tell me a bit about where you live and who you live with...

- Where you live, how long you've lived there
- Who you live with?
  - o If have children: How old are they?
  - o Any pets?

And are you currently working?

- IF WORKING PROBE: What kind of work do you do? Full time or part time? And are you currently working from home or traveling to your workplace?

And do you currently have any studying or caring responsibilities?

The topic of our discussion today is outdoor leisure and recreation activities in Scotland. Before we begin, can I just check, do you have a health condition or disability which can limit your ability to participate in outdoor activities?

- PROBE ON TYPE OF CONDITION (PHYSICAL/MENTAL) BUT STRESS THAT PARTICIPANT DOES NOT HAVE TO GO INTO DETAIL IF THEY DO NOT WANT TO

Thanks. So, first of all can I ask, what comes to mind when you think about the outdoors and outdoor activities in Scotland?

- PROBE FOR POSITIVES AND NEGATIVES

And, we'll talk about these in more detail later on but, would you say there are open or green spaces near to you that you can use for leisure and recreation?

- How accessible are they?
- And how would you rate their quality?
- What makes a good quality open or green space?

## 3. Participation in outdoor recreation

Before we talk about things in a bit more detail, I just want to clarify a couple of the terms I will be using. When I say 'outdoors' this can mean mountains, moorland, forests, lochs, beaches and the coast, and also open spaces in towns and cities such as parks, woodlands and paths.

And by 'outdoor activities', I mean any non-motorised activity carried out outdoors for leisure purposes. This can include informal everyday activities, such as walking the dog or

family outings, as well as a range of other types of activities such as cycling, hill walking and water sports.

To begin, can you tell me, in the last two weeks, how often have you taken visits to the outdoors for leisure and recreation in Scotland? This can include leisure trips taken from home or while away from home on holiday, provided the holiday was in Scotland.

- What kinds of activities did you take part in? Anything else?  
PROBE FOR DIFFERENT ACTIVITIES SUCH AS: walking (including dog walking), running, cycling/(mountain) biking, family outings, fishing, water sports, hill walking, nature watching, picnics, camping, sightseeing/visiting attractions including (local) parks
- Is this a typical two weeks or do you normally do more or less?
- Does it vary by time of year?

IF HAVEN'T DONE ANYTHING IN THE LAST TWO WEEKS: How often, on average, would you say you take visits to the outdoors for leisure and recreation in Scotland?

- PROBE: Weekly? Monthly? Less often?
- What kinds of activities have you taken part in? Anything else?  
PROBE FOR DIFFERENT ACTIVITIES SUCH AS: walking (including dog walking), running, cycling/mountain biking, family outings, fishing, water sports, hill walking, nature watching, picnics, camping, sightseeing/visiting attractions including (local) parks
- Does it vary by time of year?

ALL: And thinking back over the last year, are there any other outdoor activities that you've taken part in? This can include trips taken from home or while away from home on holiday, provided the holiday was in Scotland.

- PROBE FOR DIFFERENT ACTIVITIES SUCH AS: walking (including dog walking), running, cycling/mountain biking, family outings, fishing, water sports, hill walking, nature watching, picnics, camping, sightseeing/visiting attractions

#### 4. Types and levels of engagement

I'd now like to ask you a bit more detail about the different types of outdoor activities you told me you take part in.

FOR EACH ACTIVITY MENTIONED ABOVE (STARTING WITH THE ONE THEY DO MOST OFTEN) ASK THE QUESTIONS BELOW (NOTE: NOT ALL QUESTIONS WILL BE RELEVANT DEPENDING ON ACTIVITY TYPE):

You mentioned [ACTIVITY]. Can you tell me how long you have been doing this for?

- Why did you start doing it? Or has it always been part of your routine?

**PROBE FULLY AND PROMPT IF NECESSARY:** is there anything or anyone in particular that encouraged them to start doing this activity– for example. changes in circumstances/routines (e.g. in relation to children, house moves, job changes etc) changes in financial circumstances, social influences, media/advertising influences, personal/health/wellbeing reasons, increased opportunities to participate in the activity, accessibility/availability of outdoor spaces, concerns about the natural environment (e.g. may have led people to start walking/cycling more rather than using a car, or to undertake environmental volunteering), COVID etc

And, on average, how often do you do it?

**KEY QUESTION:** And has this changed in the: Last 12 months? Last 5 years or so?

**IF CHANGED, PROBE** on main reasons for changes – e.g. Covid-19, changes in circumstances/routines (e.g. in relation to children, house moves, job changes etc), changes in financial circumstances, health/wellbeing reasons/motivations, influence of friends/family, more/fewer opportunities to participate in the activity, accessibility/availability of outdoor spaces, concerns about the natural environment etc

Does how frequently you do this activity change throughout the year at all?

- **IF YES, PROBE** on why – e.g.
  - o **EXTERNAL:** weather/seasonal barriers, motivation/availability of other you do the activity with, activity not running all year, cost, time etc
  - o **INTERNAL:** personal motivation, personal/work commitment, physical ability, confidence

And who do you do this activity with - do you do it on your own or with other people? Or both?

- **IF NECESSARY:** Is it part of an organised group/club or an informal activity?
- **IF JUST DO WITH OTHERS:** Would you still do this activity without these people? Why/why not?

And where do you do this activity? Anywhere else?

- How local is that to you? Do you need to travel to it? **IF YES:** is there anywhere closer to home you could do it?
- **PROBE** on accessibility and quality of these spaces

So, what would you say are the main reasons you do this activity? What do you hope to gain from doing it?

- **PROBE FULLY ON ALL REASONS**
- **IF NOT COVERED:** probe on both physical and mental health benefits
- **IF RELEVANT:** And would you say your reasons for doing it are more for yourself or for the benefits of others you do it with or both?

- And are you doing this activity primarily to experience benefits of being outdoors, benefits of being close to nature, benefits of being physically active or a combination of these?

And of all the reasons we've discussed for you doing this activity, which would you say is the main one?

- And which are the two next important ones after that?

How do you feel before, during and after doing this activity?

- What benefits do you feel you achieve from doing it?
  - o Do you feel the benefits come more from being outdoors or doing the activity? Or a combination of both?
- [IF RELEVANT] do others you do this activity with also benefit?

How important is it to you to do this activity (regularly)?

- How do you feel if you are unable to do this activity or if you are unable to do it as much as you normally would?
- How important is it to you to identify as a [runner, cyclist etc]

In general, how easy or difficult do you find it to do this activity? And what types of things make it easy/difficult?

- PROBE on any external or internal factors not already mentioned
  - o Cover availability/accessibility of places to do it
  - o Have you used any fitness apps to encourage you?
- IF NOT ALREADY MENTIONED: Do you find it easy or difficult to motivate yourself to do this activity?
- IF NO: Does anyone/anything else help motivate you to do this activity?
- You said you find it [easy/difficult]. Has this changed at all recently - has it become any easier/more difficult? If so, why?
- And what do you think would make it [even] easier for you to do this activity?

And is this activity something that you would currently like to be doing [more of / more regularly]?

- IF YES: And what prevents you from doing so? PROBE FULLY FOR EXTENAL AND INTERNAL BARRIERS TO INCREASED PARTICIPATION.
  - o Cover availability/accessibility of places to do it
- IF NO: Why is that? Is there anything that puts you off doing it more often?

REPEAT FOR ALL ACTIVITIES

ASK IF PARTICIPANT DOES NOT DO OUTDOOR ACTIVITIES AS OFTEN AS WEEKLY:

Would you currently like to be doing outdoor activities more often?

- IF YES: Are there any specific activities you would like to do [more often]?
- And what prevents you from doing so? PROBE FULLY FOR EXTENAL AND INTERNAL BARRIERS TO INCREASED PARTICIPATION
  - o Cover availability/accessibility of places to do it
- IF NO: Why is that? Is there anything that puts you off doing it more often?

## 5. Future behaviours

Thanks. I'd now like to ask more broadly about how you think your participation in outdoor activities may change in the future.

First of all, when the coronavirus restrictions end and things start to return to normal, do you think it is likely you will take part in outdoor activities more or less often or will things stay the same?

- What do you think you will do more/less of? Why is that?

And over the next 5 years or so, do you think you are likely to take part in outdoor activity more or less often than you do now or do you think it will stay much the same?

PROMPT IF NECESSARY: for example. changes in circumstances/routines (e.g. in relation to children, house moves, job changes etc) changes in financial circumstances, social influences, media/advertising influences, personal/health/wellbeing reasons, increased opportunities to participate in the activity, accessibility/availability of outdoor spaces, concerns about the natural environment etc

- IF MORE: And would this be more of the activity/activities you are currently doing or different ones?
  - o IF DIFFERENT:
    - o Why would you like to start doing that? What would the benefits be for you?
    - o How likely do you think it is you'll be able to start doing this? Why/why not?
    - o What would make it easier for you to start doing this? PROBE ON EXTENAL AND INTERNAL FACTORS
    - o And how likely do you think this is to happen? Why might it not happen?
  - o IF THE SAME/LESS: And what, if anything, would encourage you to do more? What, if anything, discourages you from doing more? PROBE ON EXTENAL AND INTERNAL FACTORS

IF THE SAME/LESS: And are there any outdoor activities that you are not currently doing that you would like to do or try in the future?

- IF NO: Why is that?

- IF YES, FOR EACH ACTIVITY THEY'D LIKE TO TRY:
  - o Why would you like to start doing that? What would the benefits be for you?
  - o How likely do you think it is you'll be able to start doing this? Why/why not?
  - o What would make it easier for you to start doing this? PROBE ON EXTENAL AND INTERNAL FACTORS

## 6. Close

That's all of the questions I wanted to ask you today. Before we finish off, is there anything else you would like to say or ask that we haven't covered?

THANK AND CLOSE

TURN OFF RECORDER AND TAKE NOTE OF PARTICIPANTS BANK DETAILS FOR SENDING THE INCENTIVES PAYMENT.

APPLIFE DIARY STAGE: For the next stage of the research we will be asking some of the people we've spoken to if they would be willing to use a mobile app, to complete an online diary over the course of two weeks to tell us a bit more about the different outdoor activities they take part in. If you were selected to take part in this stage we'd give you £40 as a thank you for using the app. Is this something you would be interested in?

IF YES: That's great, thanks. We would provide more information on that closer to the time but for now can I check, do you have a mobile phone that can download and use apps?



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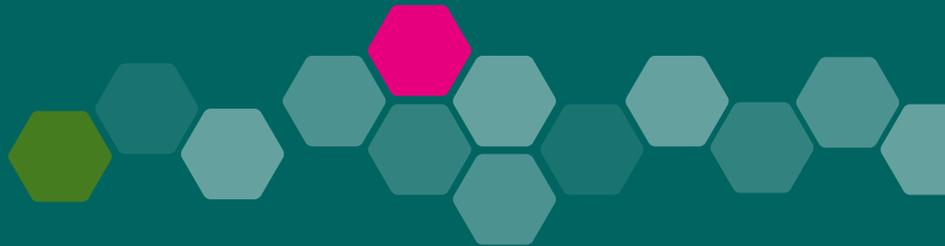
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