



Healthy Environments, Diverse Perspectives

Exploring the views of under-represented
groups on healthy environment research

Summary report

November 2020 - July 2021

Suppliers:

Beard // Askew

Imperial College
London
Consultants

I+ Helix
Centre

Funders:

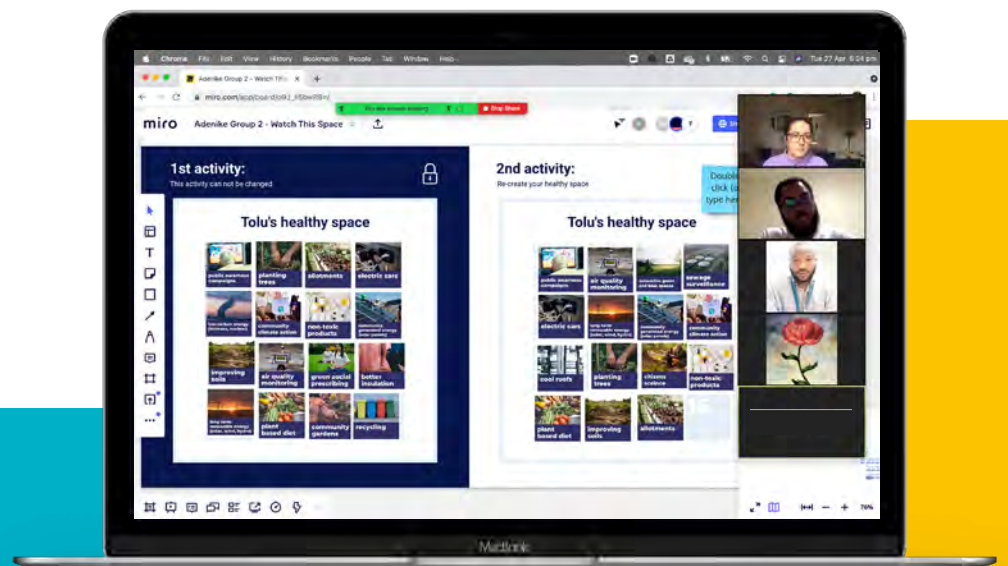
UKRI Natural
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Research Council

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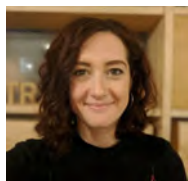
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Acknowledgements

The project was led by **Beard Askew** in partnership with a team from the **Helix Centre**, working independently via Imperial Consultants between December 2020-July 2021. The Helix Centre is part of the Institute of Global Health Innovation at Imperial College London. The project was funded by **UK Research and Innovation (UKRI)** and the **Natural Environment Research Council (NERC)**.

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Introduction

Healthy environment research looks to reduce and reverse damage to the environment, to sustain the resources needed to support healthy life on Earth. It also aims to increase understanding of the benefits of a healthy environment to health and wellbeing, and how environmental systems impact a healthy economy, society and culture.

The health and environmental issues that matter most to funders, researchers, policymakers and the public aren't necessarily the same. This can become problematic when the public, particularly people from under-represented groups, aren't involved in making decisions about the issues that are prioritised and funded. It could result in research that many groups feel is not relevant or useful to their lives. A more worrying outcome might be that research benefits some groups at the expense of others, therefore increasing the gap between those who are able to live healthy lives and those who aren't.

To address this imbalance, this report details findings from a community-led innovative online project about healthy environments. A diverse group of about 100 members of the UK public took part, with various interactive elements to spark discussion. The aim was to gather their views to inform the UKRI/NERC's healthy environment research programme in making decisions about priorities for future research, supported by public funds. In particular, this project focused on speaking with people who might be less likely to engage with natural environments, such as older people, disabled people, people from disadvantaged backgrounds, and people who are part of ethnic minority groups.

The project was delivered between December 2020 and July 2021.





Executive Summary

95 participants completed the experience which involved an online activity, watching research and 360° videos, and attending two online workshops. The participants represented different demographics, for example, 64% of the participants were part of ethnic minority groups and 29% were disabled people.

Through the conversations we learned that people's perceptions of healthy environments were linked to their **unique context and past experiences**. These attributes of healthy environments conflicted in some cases, such as safety from crowds of people versus quietness and natural sounds, which suggests that no single environment is likely to be deemed completely healthy. To participants, an important effect of healthy environments was the **promotion of mental wellbeing**.

Participants wanted to see **more research on how accessibility of environments can be more equitable**, particularly for those with physical access needs. Many wanted to prioritise **long-term research that considers sustainability and social equity**. There was also concern that consideration should be given to preventing root-causes of problems, like improving air quality in cities to avoid lung disease, rather than simply treating the effects.

It was clear to participants that human and environmental health are very closely linked and that improving or worsening one, will have a similar effect on the other. The importance of community for a healthy environment and for positive environmental change was stressed by participants. They wanted to see **research that empowers communities with knowledge and encourages behaviour change**.

The Approach

The project was designed together with a team of researchers, designers, videographers, community involvement experts, and members of the public. The team used visual storytelling, co-creation and human-centred design to help ensure the project was accessible and engaging to a range of under-represented public members.

What is visual storytelling?

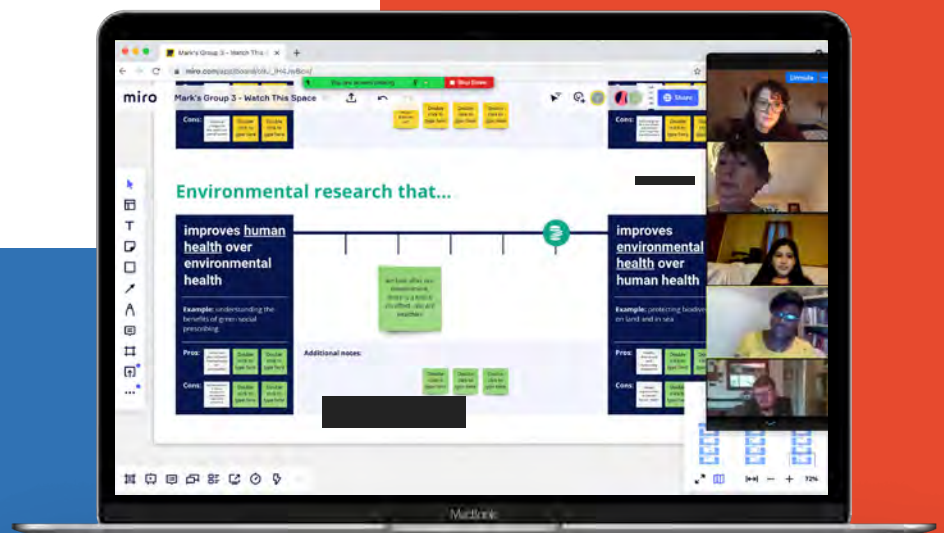
A story told primarily through the use of visual media e.g., a video or image. While text or data-heavy information can be helpful in conveying certain types of technical information or numbers, visual storytelling is an effective way to translate complex and emotional ideas into immersive experiences that resonate with people's sense of identity, values and worldview.

What is co-creation?

When members of the public and other relevant stakeholders work together on a project from start to finish. Decision-making is shared and all knowledge is valued equally.

What is human-centred design?

A creative method of research where designers work closely with users (e.g., members of the public and researchers) to craft carefully considered experiences around their needs and requirements.



How members of the public were involved

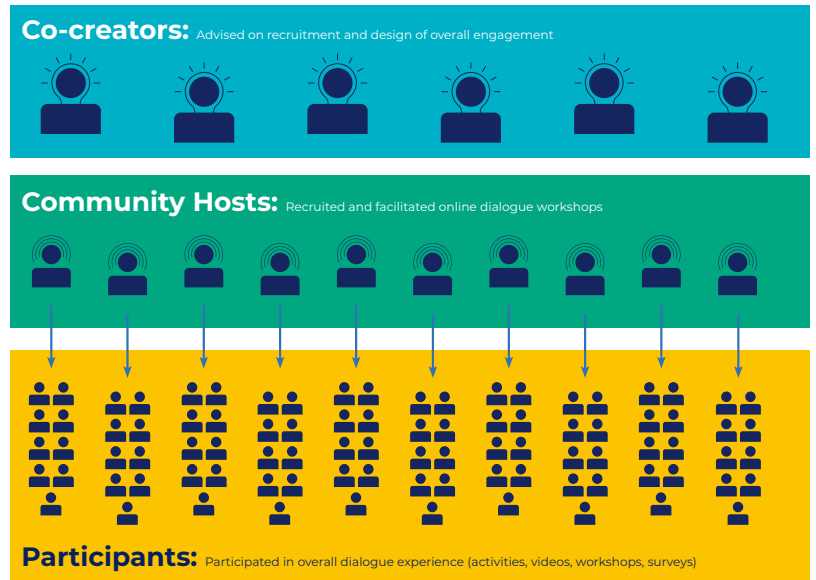


Figure 1: Levels of public involvement and engagement

Co-creators

We recruited six members of the public who had some understanding of healthy environments and experience of working on the ground with communities. They represented people of different ages, living in different environments across the UK and with different experiences (e.g. one co-creator had visual impairment). They worked with the team throughout the project and were involved in decision-making. They helped to ensure the project was engaging and accessible. For example, they came up with a brand, ideas for videos, and suggested making an interactive online activity like a game.

Community Hosts

We recruited 10 community members from across the UK who had strong links to under-represented groups. Their first task was to recruit nine additional members from their communities to become the project participants. They also facilitated two workshops with their community members and supported their access needs.

Participants

Over the course of the project, participants engaged with the research and 360° videos, completed the online Miro activity, contributed to discussions at the workshops, and filled out two surveys.

All members of the public were given appropriate support and training, including being paid for their time.

The interactive experience of the participants

During April-May 2021, 95 participants completed the experience, including interacting with several creative elements and discussing their views at **two online workshops**. The aim of using different elements was to help participants to understand the complexities of healthy environments and share their views about where they would prioritise UKRI and NERC research.



Figure 2: Cardboard virtual reality headset, used by participants to watch the 360° videos

The different interactive elements included:

- **360° videos** of 11 different environments (including urban coastal, allotment and industrial) using a virtual reality headset.
- **5-minute videos** on four areas of NERC environmental research.
- **An online activity** using **Miro** that asked people to create a visual representation of their ideal healthy space with drag and drop tiles representing different topics within healthy environment research. People were also allowed to create their own tiles.

The **workshops** each lasted 90 minutes and some sessions were carried out in breakout rooms to ensure everyone had a chance to speak up. At the first workshop, the community hosts and Helix staff facilitated discussions about what people felt as they watched the different 360° environments and why they selected particular pieces (e.g., cool roofs) for their ideal healthy space.



Figure 3: Example of a participant's ideal healthy space created on Miro

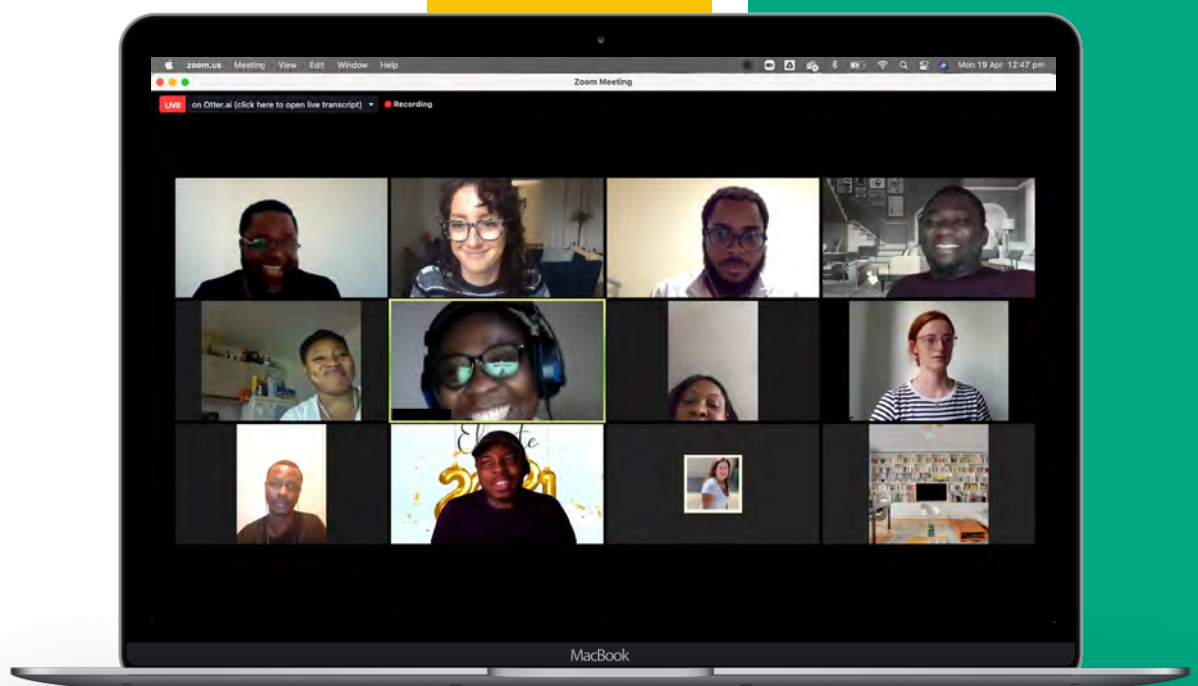
Before the second workshop the participants watched videos about NERC research, including research about the impact of climate change, pollution, green spaces and the role of the environment in the spread of infectious diseases. At the second workshop, there were discussions about whether participants changed their ideal healthy space after watching the research videos, and why. The majority of the workshop was focused on coming to a consensus about where research should be prioritised.

Key Insights from Workshops

Below are the key insights that were shared by several community groups during the workshops, which should be used to influence the direction of future research and activities.

The insights fall into **three categories**:

1. How healthy environments were defined by participants and their main attributes.
2. What participants thought about environmental research areas, and the main issues they thought should be the focus for future research.
3. Wider issues that should be considered by organisations like NERC when designing future healthy environment research programmes.



Insights relating to participants' understanding of a healthy environment

Insight 1: Feeling safe makes an environment seem healthier. For wheelchair users, safety was an important part of supporting their needs, and for others, feeling safe came from being among people. Busy urban spaces were where many participants felt safest. This contributed to perceived environmental healthiness despite typically being more polluted than rural spaces.

Insight 2: Healthy environments were perceived as those that are **quiet**, except for natural sounds such as birdsong. Noises from industry or vehicles made an environment seem less healthy to participants.

Insight 3: Environments that positively impacted participants' **mental health and wellbeing** were seen to be healthy. These tended to be rural, natural environments, but vast open spaces in cities were also beneficial to the wellbeing of those who lived in cities.

Insight 4: Preferences for certain environments were often influenced by participants' **past life experiences** which affected their views of healthy environments. For instance, seeing the countryside as healthy based on fond childhood memories, or beaches as unhealthy due to experiences of polluted coastlines.

Based on these insights, in developing a future healthy environment research programme, NERC should consider:

- Looking into research on noise pollution and feelings of safety in relation to wellbeing and use of green spaces.
- Listening to diverse voices to better understand and define the characteristics of rural and urban environments that people find beneficial to mental health and wellbeing.
- Conducting research that seeks to understand different community experiences with the natural world and how personal connection to nature plays a role in maintaining healthy environments.
- Understanding that no single environment is likely to be viewed as 'completely' healthy. For instance, a city's crowded environment might invoke feelings of safety but also bring unwanted noise pollution.

Insights relating to participants' views on healthy environment research issues

Insight 5: Participants felt that **equal access to public space** was an important part of healthy environments and wanted to understand how this access can be improved, particularly through sustainable public transport.

Insight 6: Participants took a **long-term view** in selecting environmental research priorities, thinking about **sustainability and social equity**. Participants also encouraged highlighting where these research areas could immediately impact policy or practice to ensure these secure political support.

Insight 7: Participants wanted research that aimed to **prevent root-causes, rather than treat the effects**, of environmental problems that are affecting people's health. This includes improving air quality in cities and innovative approaches to track the spread of infectious diseases (e.g., monitoring wastewater).

Based on these insights, in developing a future healthy environment research programme, NERC should consider:

- Partnering with other sectors, such as architects and developers, to ensure equal access to environments is considered in research.
- Ensuring long-term research appeals to stakeholders (e.g., politicians) by highlighting the possible short-term results that may provide immediate benefits.
- Ensuring long-term research is funded now to benefit future generations.
- Prioritising research that seeks to prevent further damage to the environment and people's health, such as improving air quality in cities.

Insights relating to wider issues that participants suggest healthy environment research should consider

Insight 8: Almost all community groups agreed that **environmental and human health were linked**, and both should be considered in research funding decisions.

Insight 9: Participants highlighted the importance of **healthy environments and healthy choices** being accessible to all. Affordable housing was seen as an essential requirement for public health and inclusion in healthy environments research.

Insight 10: Participants felt that **community spaces and activities**, such as allotments and communal gardens, can help create a healthy environment and also encourage people to protect the environment.

Insight 11: Research which helps **empower communities with knowledge and encourages behaviour change** was important to participants. This should be approached carefully to avoid blaming the public for issues that are beyond their control, such as plastic waste from medications.

Based on these insights, in developing a future healthy environment research programme, NERC should consider:

- The intrinsic link between environmental research and human health.
- That some more deprived communities may not engage in supporting healthy environment research without appropriate support and recognition that other societal issues might be more important to them.
- Drawing on communities for co-design of environmental research projects which have participation from the public.
- A greater understanding of environmental issues could empower individuals to support change locally and nationally.

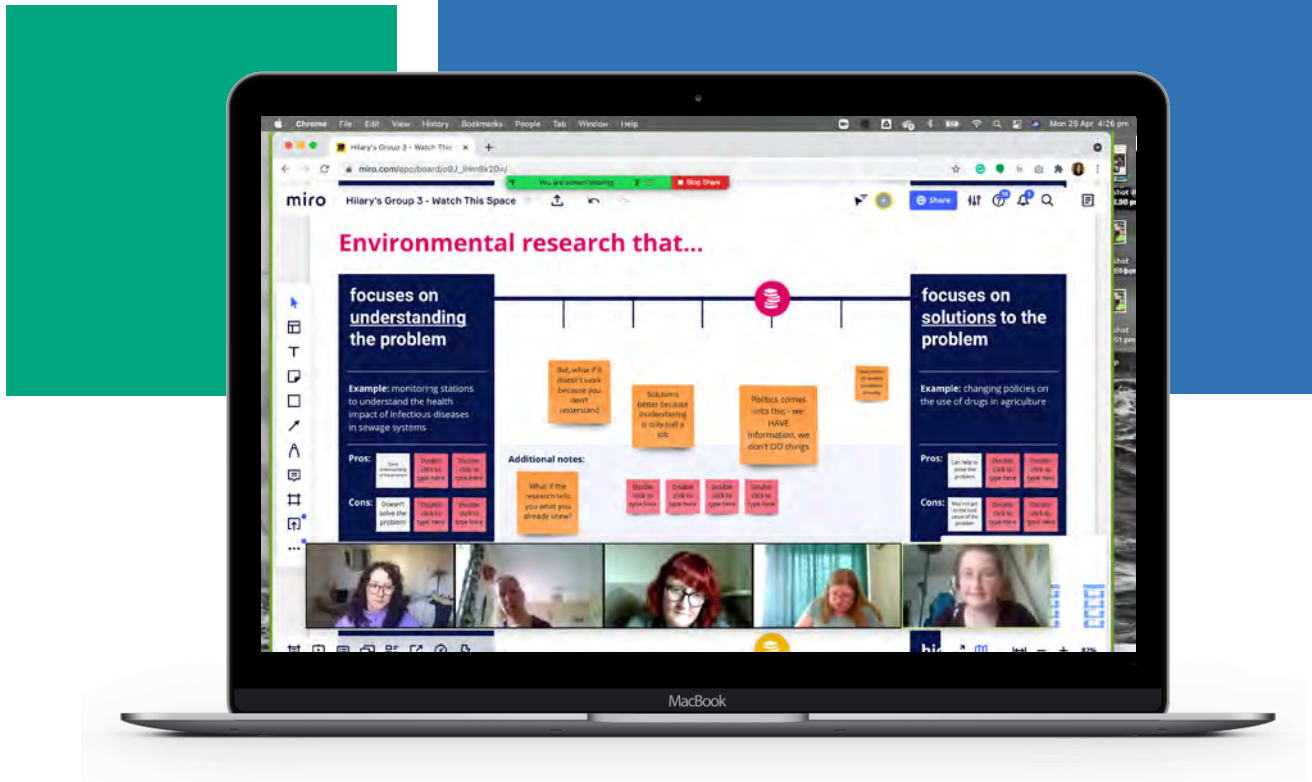
Conclusions from the Insights

Through this project we learned that participants' views of healthy environments varied across, and between, community settings. We found that participants' access needs and past experiences affected how they defined and perceived healthy environments.

In general, healthy environment attributes that were agreed upon by most participants related to sounds, safety, benefits to wellbeing, and familiarity. These attributes can conflict, therefore it may not be possible for any environment to be considered 'completely' healthy. The 360° videos and related discussions highlighted to participants that healthy environments aren't only those that are "natural" and "green". To live a healthier life, people need to have access to different types of environments which can offer the facilities they need; including green, residential, and industrial.

Several conversations covered how the public could change their behaviour to benefit the natural environment, but there was also concern that some issues were outside of the public's control and should be tackled by senior decision-makers such as governments.

Participants expressed the importance of community empowerment to enact change as well as research on certain healthy environment topics, many of which were previously unknown to them. Research areas that sparked interest among participants included cool roofs to reduce deaths from environmental heat, and monitoring wastewater for early detection of infectious disease outbreaks. Physical environment accessibility and greener, more inclusive transport were areas that participants, particularly those with physical disabilities, felt were lacking in current research.



The power of communities and effect of inequalities in society were identified as wider issues to be considered in healthy environment research programmes. Participants felt the public should be better informed about research that impacts them. Almost all community groups agreed there was a strong link between environmental and human health, and that both should be considered in research funding decisions.

The input from both community groups as a whole and individual participants, provided rich and valuable insights to the project. Participants contributed their own unique thoughts, views, and experiences to the dialogue, reflecting the positive and open space fostered by the approach and team members.

Our findings present insights that strengthen known views of the UK public and also contribute views that were not previously considered by UKRI and NERC. These views, that both broaden and strengthen the evidence base, should be considered when developing future healthy environment research programmes.

Annex: Evaluation of the Approach

To evaluate the approach, the co-creators and participants filled out a survey about their experiences and the community hosts attended a reflection session to share their views. The Beard Askew/Helix team gathered this feedback and made recommendations for anyone looking to carry out a creative, online public engagement project, particularly when involving under-represented communities.

Participant demographics

Having community members carry out the recruitment through their communities and facilitate the workshops led to a diverse group of participants, and relaxed workshop experience. For example, 64% of the participants were part of ethnic minority groups and 94% felt comfortable at the workshops. The team supported people with specific access needs (e.g., hearing loss, neural divergence and those whose primary language was not English). This was done through having a Palantypist at the workshops (who typed up what was being said); holding separate workshops with individuals to give more time and support to those who wanted it; and having a community host translate.

Over half of the participants were encouraged to sign-up because they could take part online (52%). As a result, almost a third of the participants were disabled people, a similar number had long-term conditions, and a quarter had caring responsibilities.

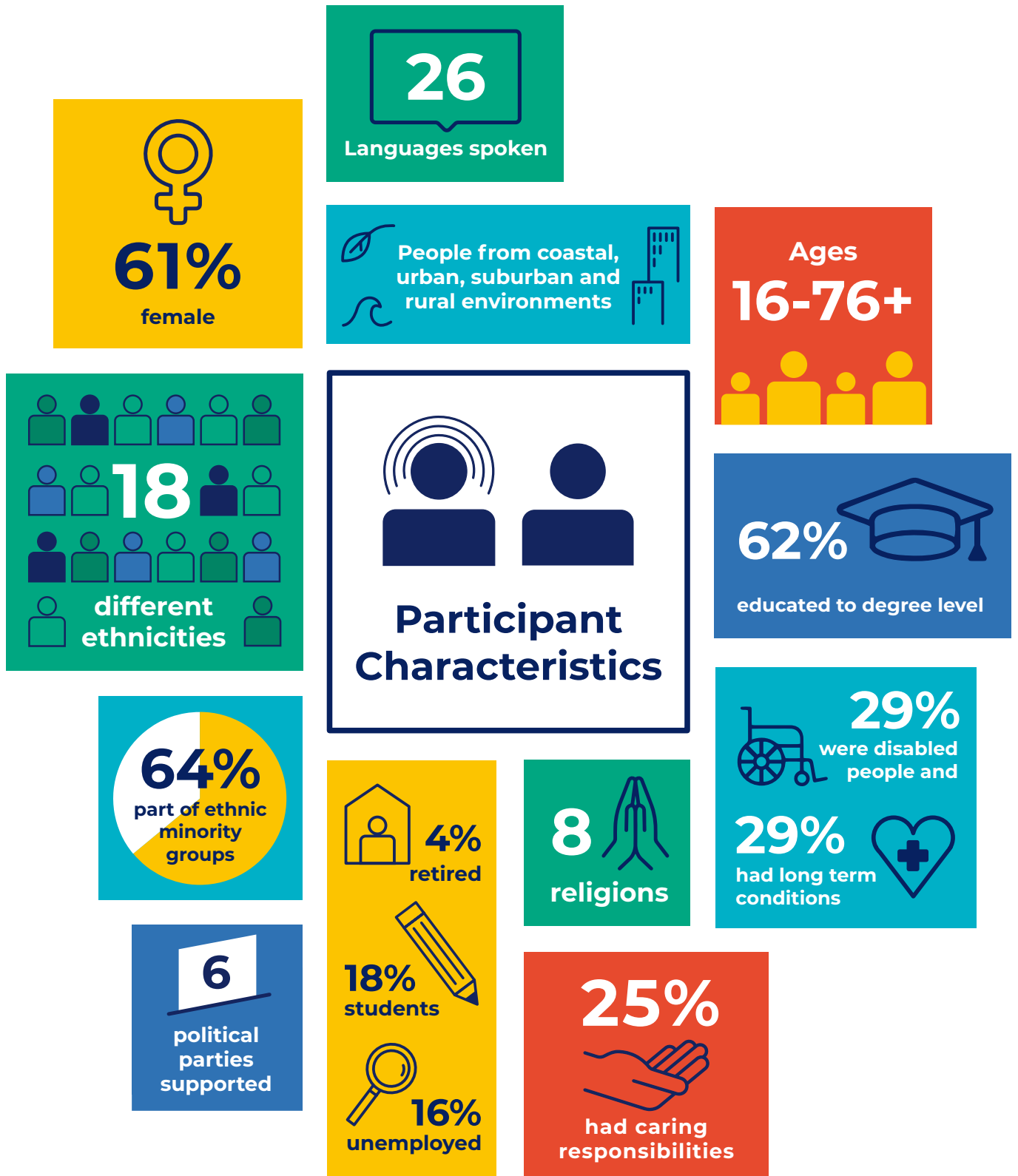


Figure 4: Characteristics of 95 participants

For more information on participant demographics and survey evaluation see our full report.

<https://www.ukri.org/wp-content/uploads/2021/09/UKRI-220921-HealthyEnvironmentsDiversePerspectives-FullReport.pdf>

What went well?

Of the 89 participants that completed the final survey, 97% agreed that they enjoyed being part of the project, 93% felt that their voice was heard, and 97% would recommend experiences like this to others. Almost all of the participants gained knowledge from watching the research videos (93%).

“I really learned so much about research that is going on. In the second lot of videos I learned so much, it was really interesting. I also absolutely loved the VR headsets and how it took me to places I can’t go to.”
- Participant

What could have been improved?

Digital access and issues

One of the asks from UKRI and NERC was that the project had to take place remotely due to the COVID-19 pandemic restrictions. Although steps were taken to make the experience accessible to participants (e.g. dongles were offered to all participants without internet access), the nature of the project heavily relied on technology and all participants having access to the internet and devices. This may have excluded people from lower-income households or people who are less comfortable with using technology. More budget and time would have enabled us to ensure access needs were covered (such as training to use a loaned device).

Interaction between individuals online is, of course, different to a face-to-face workshop. On the one hand, the option to type in the chat and having more vocal people muted might encourage those who are less confident in a face-to-face setting. On the other hand, it is more challenging for the facilitator to know whether someone is present at the meeting, for example if their video is off. However, being able to join remotely also helped people to participate e.g. those who had caring responsibilities. 29% of the participants were Muslim and some reported they appreciated not having to turn on their videos as it was Ramadan.

Improvements to interactive elements

The interactive element with least agreement was the virtual reality headset, of which 20% strongly disagreed or somewhat disagreed that they “liked using the VR headset to watch the 360° videos of different locations”, with one person reporting that it made them feel sick. However, participants could view the videos of the environment without the headset and so could still take part.

The Miro online activity did not work on smartphones. Therefore, a different, more accessible, free platform could be used. Alternatively, more budget and time would allow the development of a more user-friendly game which could have been co-designed with the co-creators. A different software also could make the data analysis process more automatic.

Conclusions from the Approach

In conclusion, the innovative online approach was successful in exploring under-represented groups' perceptions of healthy environments, learning about people's priorities for research, and differences in views between community groups. Using a community-led approach, we were able to create an engaging experience and recruit a diverse group of participants, including people who are part of ethnic minority groups and those with specific access needs.

It is likely that online or hybrid experiences (with some people online) are going to continue to be important, whilst the COVID-19 pandemic continues. The learnings from this project show that using storytelling and interactive co-created elements (e.g. videos), can help members of the public to understand complex topics and can spark conversation. Conducting a project remotely can, on the one hand, potentially be better for the environment, cheaper, faster, incur less cost, and save travel time. It can also increase the diversity of the participants e.g. from across the UK, or people who might find it more difficult to attend in-person discussions. However, appropriate time, expertise, and a flexible budget, should be factored into projects to support access needs.

The Beard Askew and the Helix team gathered this feedback and made recommendations for anyone looking to carry out a creative, online public engagement project, particularly when involving under-represented communities. Please see our full report for more information.

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