



Climate Change Communication and Engagement With Older People in England

Briony Latter^{**†}

Department of Geography, King's College London, London, United Kingdom

OPEN ACCESS

Edited by:

Anabela Carvalho,
University of Minho, Portugal

Reviewed by:

Alison Anderson,
University of Plymouth,
United Kingdom
Mikkel Eskjær,
Aalborg University
Copenhagen, Denmark

*Correspondence:

Briony Latter
latterbi@cardiff.ac.uk

† Present address:

Briony Latter,
Centre for Climate Change and Social
Transformations, Cardiff University,
Cardiff, United Kingdom

Specialty section:

This article was submitted to
Science and Environmental
Communication,
a section of the journal
Frontiers in Communication

Received: 04 January 2022

Accepted: 28 March 2022

Published: 28 April 2022

Citation:

Latter B (2022) Climate Change
Communication and Engagement
With Older People in England.
Front. Commun. 7:848671.
doi: 10.3389/fcomm.2022.848671

Although an important and influential demographic, older people have largely been forgotten about in the field of climate change communication and engagement. Despite the United Kingdom (UK) having an ageing population, little is known about how best to involve them in the climate conversation. Based on Climate Outreach's Narrative Workshop methodology, this research contributes towards addressing this gap in the literature by providing some evidence towards what language, values and framing could work well with older people in England, as well as areas to potentially avoid and explore further. The findings of this research demonstrate the importance of community, consideration, responsibility and an international outlook to the research participants, as well as their views that governments and organisations hold important power in relation to climate change.

Keywords: older people, climate change, communication, engagement, narrative, framing, language, values

INTRODUCTION

Countries such as the United States, China and the UK are responsible for some of the largest historical greenhouse gas emissions (Evans, 2021), reductions of which need to be “immediate, rapid and large-scale” to address climate change (IPCC, 2021). Although both system change and behaviour change are needed (Capstick et al., 2021), a huge 92% reduction in people's lifestyle carbon footprint (mainly food, transport and housing) is estimated to be needed in the UK by 2050 (Akenji et al., 2021). The UK's climate change advisory body has recognised that although some solutions will be technological, societal and behavioural changes play a large role (Committee on Climate Change, 2019). This indicates that people need to be aware of changes that will impact them and wider society. Such changes will require public buy-in (Whitmarsh et al., 2021) and understanding perceptions such as attitudes and beliefs can help to achieve public engagement (Whitmarsh and Capstick, 2018).

Although public awareness about climate change has increased in the UK over the last 15 years (Whitmarsh et al., 2021), it is important to recognise that the public are not a single group (Pearce et al., 2015) and tailored communication can better connect with people. Who communicates is important as well as what they communicate about, and this can vary considerably depending on different audiences and countries (Department for Business Energy Industrial Strategy, 2021; Sabherwal and Kácha, 2021). “Effective” climate change communication can imply that it is used as “a tool to a certain effect... producing a specific relationship and outcome” however, it is argued

that engagement with climate change is “tied to social and material interactions” (Carvalho et al., 2021, p. 2). Where the term is used in this research, it is done so with the recognition that climate change messages are only one part of communication and are socially situated, and therefore should be used as part of wider public engagement (Nisbet, 2019).

It is now recognised that simply providing a one-way flow of information is not the most successful way of communicating about climate change and does not necessarily lead to behaviour change (Pearce et al., 2015). Instead, two-way engagement can help to create a feeling of “climate citizenship” (Corner and Clarke, 2017, p. 120). The importance of narratives has been highlighted as a way to connect people with climate change (Veland, 2018), for example through different scales and place attachments such as cities and the countryside (Howarth and Parsons, 2021). Using the definition of narratives as “simple stories that describe a problem, lay out its consequences and suggest (simple) solutions” (Hermwille, 2016), Narrative Workshops have been developed as a research methodology to engage specific groups of people in discussion about climate change (Shaw and Corner, 2017).

Language, values and framing are important aspects of climate change communication which are each outlined below. Values are defined as “guiding principles in [an] individual’s life,” for example having respect for tradition, being broadminded or having wealth (Schwartz, 1992, p. 17). These therefore refer to underlying ideas rather than specific language. Values can impact how people engage with climate change (Corner and Clarke, 2017; Whitmarsh and Capstick, 2018) and in fact, disputes are “more likely to be about values than about the underlying science” (Corner et al., 2014, p. 418), indicating the key role they can have. For example, people with altruistic values are more likely to engage in a positive way (Corner et al., 2014). One way in which values have been used is through Britain Talks Climate, a values-based approach to understanding and engaging with seven segments of the British population on climate change (Wang et al., 2020). Values can therefore underpin the particular framing or language used.

Framing is defined as “selecting certain aspects of a given issue and making them more salient in communication in order to “frame” the issue in a specific way” (Schäfer and O’Neill, 2017). There has been considerable research about how best to frame climate change in different ways, including how this might impact people’s engagement. For example, framing climate change as a health issue has gained much attention but has had mixed results (Badullovich et al., 2020; Wang et al., 2020). Climate change has also been framed differently in terms of scale and distance. For example, Scannell and Gifford (2013) found a higher level of public engagement when climate change was framed as local rather than global, though Wang et al. (2021a) argue that decreasing the psychological distance of climate change does not necessarily lead to action.

Language, a term used throughout this paper to mean specific words or phrases, can also have an impact when communicating about climate change. Describing climate change as an emergency or crisis has become increasingly common, and although research indicates that many people see climate change

as urgent (UNDP University of Oxford, 2021), how people react to this language can vary widely from feeling threatened to feeling energised (Patterson et al., 2021). Nevertheless, it is suggested that disagreement does have a place in communication as it can create discussion (Shaw and Corner, 2017). By using certain language, issues can be framed to engage with people in different ways, for example, talking about eating less meat and using forms of active travel rather than a car may be framed in a way that focuses on individual rather than systemic action. Although language, values and framing can be important, other elements also play a key role such as messengers and context (Nisbet, 2019).

Although there are some exceptions, most climate change communications research has been conducted on WEIRD (Western, Educated, Industrialised, Rich, Democratic) populations (Sabherwal and Kácha, 2021), as has social psychology research on climate change more broadly (Tam et al., 2021). For example, a large proportion of studies about framing climate change are based in and have first authors from the United States (Badullovich et al., 2020). As Bell (2021) argues, how environmental problems and solutions are framed depends on who is part of the conversation, and diverse involvement is needed to have fair and suitable solutions for different groups of people.

There has understandably been a lot of focus on the younger generation, given the future impacts of climate change, widespread climate anxiety (Hickman, 2021) and prominent school strikes across the world (BBC, 2019). Regarding the interaction between younger and older generations in the UK, it is argued that despite it becoming an “accepted truth,” there is not actually a conflict between them with regards to climate change attitudes and they should work together (Hill, 2021). As the UK population is getting older (Office for National Statistics, 2021) and the over 65s are the demographic with the highest percentage of voters (Skinner et al., 2019), the need to find out how to engage older people with climate change is slowly but increasingly being recognised (Greener and Wiser Taskforce, 2009; Centre for Ageing Better, 2021; Haq, 2021; Jones and Hiller, 2021; Pillemer et al., 2021). Also, older people are particularly impacted by the health dimensions of climate change in the UK such as heat waves and increased temperatures (Paavola, 2017). There is no agreed definition of “older people” and some research has segmented them, for example “baby boomers” and “pre-war” (Duffy, 2021) or “seniors” and “elders” (Haq et al., 2007). However, a common definition is those aged 65 and over (Age UK, 2019). Older people could have an important role to play in addressing climate change, but their potential contribution and involvement is being overlooked (Smyer, 2017; Haq, 2021).

Carvalho et al. (2017), p. 122 argue for research to concentrate on the general public’s “political engagement with climate change.” With older people having considerable voting power in the UK (Berry and Hunt, 2016), more engagement with them on climate change could have consequences for how they engage in a political context. There may also be potential for them to engage as consumers (Frumkin et al., 2012). This indicates that older people could put pressure on organisations as well as politicians to act on climate change. Research into engaging older consumers suggests that “autonomy and self-sufficiency, social and spiritual

connectedness, [and] altruism” (Wolfe, 1994, p. 32) are effective values, as are “being responsible and sensible” (De Jonquieres, 1993, cited by Sudbury and Simcock, 2009, p. 27). However, these studies are over 25 years old and relate only to older people as consumers, and may not be applicable to other contexts.

Being part of a community can be important for older people (Age UK, 2021) and being involved in activities such as volunteering could be an opportunity for older people to address climate change, one which is currently overlooked (Haq, 2021). However, Howarth and Parsons (2021) suggest caution around “community” narratives as the term can be interpreted both positively and negatively, and older people should not be seen as a homogenous group (Swift and Steeden, 2020).

There has been very little research about how to communicate with older people about climate change. However, some evidence shows that certain values and framing could work. Climate change has sometimes been framed as an intergenerational or legacy issue, though having children or grandchildren does not necessarily affect people’s level of concern (Greener and Wisser Taskforce, 2009; Andor et al., 2018; Wickersham et al., 2020). However, it is argued that collaboration between the younger and older generations could be a successful way forward due to older people valuing legacy (Haq, 2021), suggesting that further research may be needed. Other research suggests that security and safety (Dychtwald and Flower, 1989; cited by Sudbury and Simcock, 2009; Schewe, 1990) are important values to them. However, as this is not in relation to climate change, further research could provide useful information about how successful this framing would be.

Although it could be argued that age may not be the most appropriate way to segment people to understand differences in climate change engagement (other demographic factors may be more important, or it may be more appropriate to cut across factors such as age, geography and ethnicity such as in Britain Talks Climate; Wang et al., 2020), there is value in exploring this for older people as climate change communication with older people is still a relatively undeveloped area of research and disregarding this generation may be a “critical missed opportunity” (Moser, 2017, p. 1). This lack of research means that there may be important missing elements of how to better involve them in the climate conversation. Therefore, this research aimed to find out how to effectively communicate climate change with people aged 65 and over in England. Specifically, the research objective was to identify what language, values or framing relating to climate change elicit positive or negative feedback and resonate (or not) with older people.

MATERIALS AND METHODS

This research used an interpretive social science methodology, focusing on observing and interpreting the perspectives of those taking part. This approach acknowledges that engagement is subjective and it is specifically interested in the subjective views and behaviours of participants – taking an “insider view” rather than imposing specific meanings onto them (Gephart, 2019).

To achieve this, Climate Outreach’s Narrative Workshop methodology was used, which looks at values and narratives to find effective ways to communicate climate change with specific audiences (Climate Outreach, 2016; Shaw and Corner, 2017). The Narrative Workshop methodology creates a “discursive and conceptual space” and allows people to share their own subjective understandings and reflections on climate change (Shaw and Corner, 2017, p. 282). Given the importance of two-way communication, focus groups were suitable as they allowed participants to share and appreciate each other’s experiences (Burgess, 2005) to draw out commonalities within this demographic.

By taking an interpretive social science approach, this research aims to go beyond one-way forms of communication and understand effective discourse and engagement through the use of group discussion around carefully crafted narratives, specifically aimed at older people.

Data Collection

Three focus groups were conducted. Data was collected between November 2017 and February 2018 and was approved by the Research Ethics Office at King’s College London (MR/17/18-36).

The focus groups were 90 min long, held in-person and split into two parts. The initial part (~35 min in length) involved a discussion about participants’ values, wider demographic values, and change in the community and the future (see **Supplementary Data**). Climate change was not directly asked about in this first section to see if the topic occurred naturally. This helped to elicit more genuine responses, a factor that is not commonly considered in research about climate change and the public (Shaw and Corner, 2017). The next part (~45 min in length) used 14 short paragraphs of text (“narratives”) to determine whether particular ways of communicating were effective (see **Table 1**). Participants were not shown the titles of each narrative; they were numbered instead. The narratives were split into two categories: those which included or were based on language, values or framing that were expected to resonate with older people, and those that were unknown whether they would resonate with older people.

The design of the narratives drew on the following research:

- The Schwartz Structure of Human Values (Schwartz, 1994)
- A review of existing values that work with older consumers (e.g., De Jonquieres, 1993, cited by Sudbury and Simcock, 2009; Schewe, 1990)
- Previous research about values, language and framing in relation to climate change (e.g., Greener and Wisser Taskforce, 2009; Scannell and Gifford, 2013; Corner et al., 2014).

Once a list of values, language and framing had been gathered from this existing research to use as a starting point, narratives were written that aligned with these. For each narrative, participants were asked to highlight words that they felt positively and negatively about. There was a short group discussion after each paragraph exploring their decisions. “Thick description” (Geertz, 1973) of the focus groups was recorded to ensure transferability of the research (see **Supplementary Data**).

TABLE 1 | Narratives created for the focus groups.

Title	Narratives that were expected to resonate with research participants
Security/safety—national	Climate change is a threat to national security as temperature increase and rising sea levels may lead to conflict and mass migration. We need to defend and protect our country from any danger that it may bring to keep our nation safe and secure.
Security/safety—family	Both very young children and older people are more susceptible to the effects of climate change. The safety and security of my family is important to me and I want to make sure they are protected from it. I want my children and grandchildren to grow up in a safe and secure world.
Responsible/sensible	We have a responsibility to take action on climate change, and trying to mitigate the bad consequences of it is a sensible thing to do. It is obvious that it has negative consequences so we should be rational and take action in a no-nonsense manner. We should also take responsibility for our own actions that contribute to it and hold others accountable for their actions if they are guilty of making our environment worse.
Altruism	We should be considerate of the impact of climate change on others. We should help others who are dealing with the effects of it out of goodwill and decency. It is the right thing to do.
Social and spiritual connectedness	Caring for our neighbours and our society is essential in response to the impacts of climate change. We are all interconnected and part of a community, so we should be aware of impacts on others as well as ourselves. We are deeply connected with each other and our environment, and responding to this issue could bring us together with a shared sense of purpose.
Autonomy/self-sufficiency	It's such a complicated problem and we can't wait for the world to agree on what action to take while its consequences are getting worse. To address it we have to be confident and take action ourselves to make a difference independently. We are self-sufficient and can only rely on ourselves to take action.
Social justice and equality	Climate change will hit the poorest the hardest. This is unfair and unjust. We should be working to help those who are less able to help themselves. It should be those responsible who pay the price, not those who are in the wrong place at the wrong time. We should ensure that people are not affected unequally.
Title	Narratives that were unknown whether they will resonate with research participants
Intergenerational	Its effects will hit the younger generation and future generations the hardest. It would be selfish to only think of ourselves. Our generation should look after our planet so that our children, grandchildren and those that haven't been born yet will be able to have the same experiences that we have.
Local	Its effects are happening on our doorstep. We should work together with our neighbours and people in our local community to find solutions. If we all take small steps on a local level, this will lead to big change.
International	Climate change is a large, global issue. It affects people in countries all across the world. We should pressure our governments and large organisations to work internationally to solve the problem. By working together globally we can make a huge impact.
Protect environment/ unity with nature	Humans have a connection to nature, and we should do what we can to protect and conserve the environment. The natural world should be preserved and we need to keep it safe from further harm. We should safeguard it so that plants and wildlife can thrive.
Health	It poses a threat to human health. People are already dying and their health is being affected by the increase in heat, flooding and air pollution. To continue to have healthy lives we need to tackle climate change. This will ensure that we have clean air, safe drinking water and a healthy future.
Intelligent/capable	Humankind has always been resourceful and we have achieved great things. We are capable and intelligent enough to succeed in finding innovative solutions to climate change.
Creativity	We need to find creative and imaginative solutions to climate change. Human ingenuity will succeed and we can think outside the box to find ways to solve these problems.

Location

Although the number of focus groups needed to reach sampling saturation could not be known beforehand, three focus groups were conducted based on feasibility considerations and prior research which suggests that between three to five focus groups tend to be needed, though this can vary depending on the participants (Hennink and Kaiser, 2020). The focus groups were held in England in the Borough of Camden (London), Leicestershire and the East Riding of Yorkshire. These locations were chosen to address the gap in the literature in the UK as well as due to access and cost considerations. Although demographic data such as gender and ethnicity were not recorded, different areas of the country were chosen with the aim of having

some diversity between the groups, for example differences between urban and rural living (Office for National Statistics, 2011). This aimed to reduce the risk that commonalities were due to reasons other than age. In London, a central Borough was chosen with the aim of having participant representation from an urban location. However, given that the Borough of Camden stretches from very central locations such as King's Cross up to Hampstead village, this could not be guaranteed. In Leicestershire and the East Riding of Yorkshire, the focus groups were held in Leicester city centre and Beverley town centre, respectively. People could take part if they lived anywhere in each county, with the aim of having a mix of urban and rural participants.

Participants

Seventeen participants took part in the research. For each focus group between four and seven participants were recruited, in line with suggested sample sizes (Bedford and Burgess, 2001; Climate Outreach, 2016). A non-probability sample was used to answer the research objective by approaching existing community groups. However, snowballing was used for a small number of participants as the full amount could not be recruited using purposive sampling.

There were four sample selection criteria. The first was age (65 and over) in line with previous research defining older people. The second was those who are not classified as vulnerable, to comply with the minimal ethical risk criteria. Thirdly, attempts were made to mitigate the possibility that participants already had extensive knowledge about or involvement with climate change, as the aim was to include a range of people, not specialists in the topic area. Therefore, only a broad outline of the topic was provided and participants were not recruited through environmental groups. Lastly, participants had to be based in the area where each focus group took place.

Approach to Analysis

The focus groups were recorded and transcribed. Prior to the analysis, assumptions about the research were listed to acknowledge and manage any existing biases (O'Leary, 2012). There were two distinct parts to the analysis which both used thematic analysis to understand: (1) participants' responses to *each narrative* regarding what they highlighted in the text and (2) participants' responses *across multiple narratives* and the wider focus group regarding what they discussed.

The Framework approach to thematic analysis was used in both parts of the analysis to understand participants' responses to each narrative and across multiple narratives. This approach was developed by NatCen Social Research in the UK (Bryman, 2016) and involves data being organized and managed "through a process of summarization, resulting in a series of themed matrices" (NatCen Social Research, 2022). In this case, the matrices were created as spreadsheets in Microsoft Excel.

When analysing responses to the narratives, words or phrases that participants highlighted as positive or negative were recorded and counted. Feeling positively towards narratives was described to participants as words or phrases that resonated with them or that they felt were clear, helpful or constructive. Feeling negatively towards narratives was described as words or phrases that they felt were unhelpful, inappropriate, confusing or they did not agree with. These were then consolidated across the focus groups to identify which parts of the narratives the participants felt most strongly about. Once key themes were identified in the wider focus groups (as described below), links were made between these themes and the most commonly highlighted parts of the narratives.

When analysing the wider focus groups, themes were identified through an iterative, manual process of writing and reviewing codes across the focus group transcripts. The themes were then inputted into spreadsheets to further review and organise them. This analysis aimed to identify

and understand broader themes that were not limited to participants' responses to individual narratives and included the initial section of the focus group, before the narratives were introduced. This identified key aspects of the focus groups, for example by looking for repetitions of topics, differences of opinion and topics that were unprompted and prompted.

RESULTS

The results are organised under four key themes that emerged from the focus groups during the broader analysis: (1) consideration and responsibility, (2) community, (3) power, and (4) an international outlook. As well as these being themes that were frequently mentioned and discussed across the focus groups as a whole, some of the narratives fit within these themes. Each theme is discussed before specifically looking at narratives (see **Table 1**) that contribute to it. A small number of narratives do not fit into these themes and are outlined underneath.

Consideration and responsibility was the most prominent theme, though all themes were discussed by at least 11 out of 17 participants (**Figure 1**). Findings were broadly consistent across the focus groups, with mostly minor differences regarding the words and phrases highlighted as positive or negative in the narratives.

Although there are nuances in participants' responses to the narratives, out of those that were expected to resonate with participants, three narratives received positive responses, two did not and two elicited mixed responses. Of the narratives that were unknown whether they would resonate with participants, four received positive responses and three elicited mixed responses.

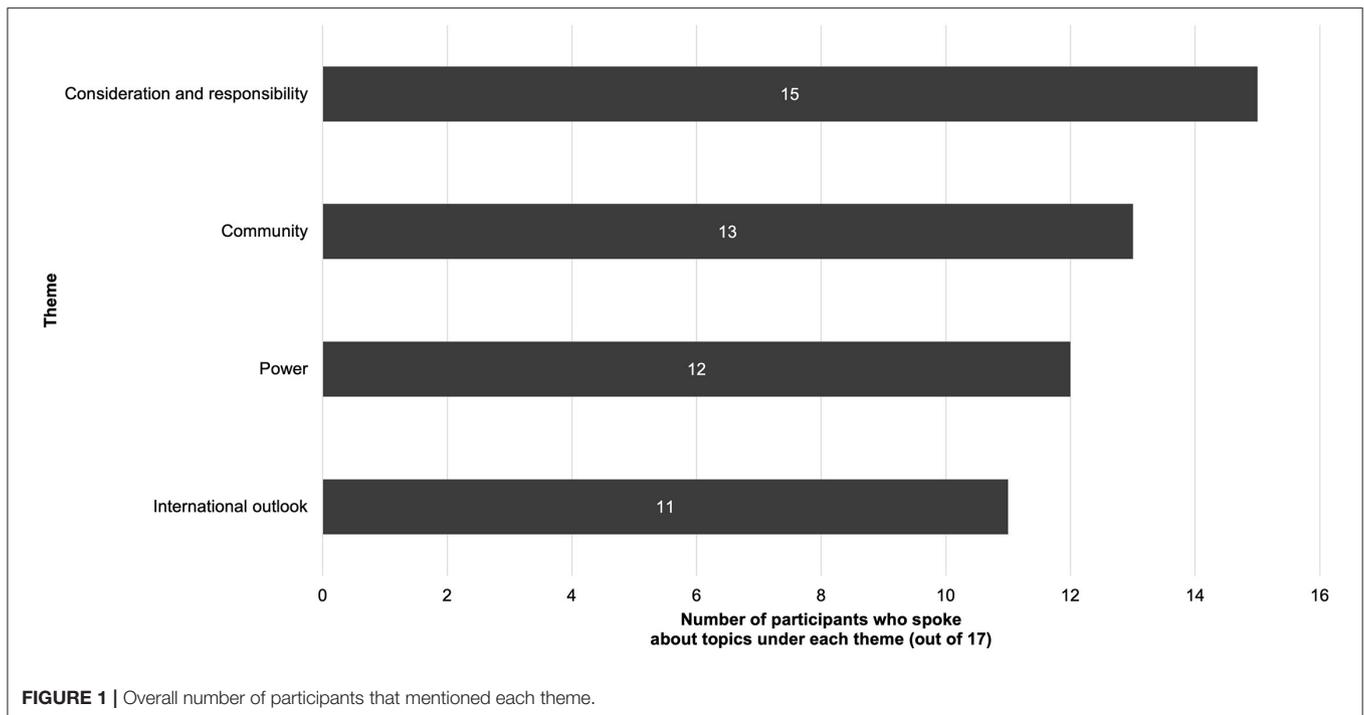
Consideration and Responsibility

Consideration and responsibility was the most prominent theme. Almost every participant (15 out of 17) spoke about topics relating to this theme on many occasions, a lot of which was during the narratives section. Many talked about consideration for others and felt that taking responsibility for climate change was important. However, there were disagreements about who is to blame and who is responsible for taking action. Some thought that people in the past or those who create "survival" emissions (Agarwal and Narain, 2003) do not have responsibility, and others felt that everyone is responsible.

"I think those of us in what I call the minority world have a huge responsibility for what we've done to the majority world." (Participant 2, Borough of Camden, London).

Most participants also spoke about consideration for others in the sense of concern or caring for others, some in response to the question "what do you think makes someone of your generation a good person?"

"I think a good person would have left the world a better place than they found it." (Participant 3, Borough of Camden, London).



Narratives about altruism and being responsible/sensible were expected to elicit positive responses and did so. The altruism narrative was the second most positively endorsed of all narratives, with the most popular phrases being “we should be considerate of the impact of climate change on others” and “right thing to do.” The reaction to the responsible/sensible narrative was also overwhelmingly positive, with the most popular phrases being “we should also take responsibility for our own actions,” and “we have a responsibility to take action.”

The intergenerational narrative was generally received positively despite some uncertainty about whether it would work well. A small number of phrases were viewed negatively, the main one being “the same experiences.” Some participants explained that they wanted better, rather than the same, experiences for future generations. The phrases and words that were viewed most positively were “our children,” “grandchildren,” “selfish to only think of ourselves,” and “its effects will hit the younger generation and future generations the hardest.”

The social justice and equality narrative was expected to elicit positive responses but ended up causing disagreements and there was a fairly even split between how many phrases and words were seen as positive and negative. The phrases “climate change will hit the poorest the hardest” and “those responsible who pay the price” were seen as negative by some participants. However, others felt positively towards the whole narrative and particularly towards the phrases “we should ensure that people are not affected unequally,” and “we should be working to help those who are less able to help themselves.” This was also the only narrative where there was a noticeable difference between the focus groups: all participants from the Borough of Camden felt positively towards the phrase “climate change will hit the poorest

the hardest,” whereas only one participant across the other two focus groups felt the same way, with five participants highlighting it as negative.

*“I don’t think that’s true. It’s not just the poor that are affected.”
(Participant 7, East Riding of Yorkshire).*

Community

This theme includes topics related to community, volunteering and connection to others. Just over three quarters (13 out of 17) of participants spoke about this theme and it was addressed multiple times. Participants discussed the importance of community, working together and spending time with groups of people in their locality. The necessity of working together was mentioned by a small number of participants, both in relation to action on climate change and societal change. The lack or decline of community was also discussed and seen as negative, though there were conflicting views about how and why this has happened. Many participants spoke about being part of voluntary groups and discussed the lack of volunteers as an important issue. However, their opinions differed about whether it was a generational issue or not.

“Younger people who live there now don’t identify as part of the community. It’s a house, not home.” (Participant 2, East Riding of Yorkshire).

*“I don’t think that’s anything to do with young and old, I think that’s just the way that we have progressed as a society...it does seem to take a lot longer to get to know people in the community.”
(Participant 6, Leicestershire).*

The narrative about social and spiritual connectedness was expected to elicit positive responses and generally did so. Many felt that “caring for our neighbours and our society is essential” was positive but that it should be done regardless of climate change. Words and phrases that were seen most positively were “community” and “we are all interconnected.”

It was unknown whether the local narrative would be viewed as positive or negative. Although there were mixed opinions, participants generally felt positively towards it, particularly that “we should work together with our neighbours and people in our local community to find solutions.”

The national security/safety narrative was expected to be viewed as positive by participants, however there was some disagreement. Many participants felt negatively about much of the language used or values that it draws upon, particularly “defend and protect our country,” “safe and secure,” and “threat to national security.”

“Temperature increase and rising sea levels’ yes, but all the rest is...so self-regarding.” (Participant 4, Borough of Camden, London).

“It’s just not a very good approach to climate change, it’s not just our country.” (Participant 2, Leicestershire).

Similarly, there was disagreement about the autonomy/self-sufficiency narrative, though participants generally felt negatively towards it. This narrative was initially expected to elicit positive responses. Many participants felt negatively towards the phrase ‘we are self-sufficient’, and the phrase ‘can only rely on ourselves’ was viewed as negative by the largest number of participants across all of the narratives.

Power

The theme of power covers who has the power to make societal and environmental change, and different spheres of influence. The theme was discussed multiple times by just under three quarters (12 out of 17) of participants. Wealth was discussed in relation to climate change and participants’ communities and values, and generated debate. Some spoke about how rich people, communities and countries will be least affected, whereas others felt that climate change will affect everyone regardless of their financial situation; this was spoken about mainly in response to the social justice and equality narrative.

Participants spoke about how they felt strongly that action on climate change had to come from governments and businesses. Some thought that governments and big organisations needed to use the power they have because of their size and influence compared to communities and individuals. However, a few also recognised the power they themselves had to create change by working together or by everyone taking individual action.

“It’s big business and it’s governments that have to make the change, and if they don’t then we’re sunk.” (Participant 3, Leicestershire).

“I don’t think small steps make a big difference. It’s got to be governments.” (Participant 6, East Riding of Yorkshire).

International Outlook

Topics related to this theme were mentioned by approximately two-thirds of participants (11 out of 17), all during the narratives section of the focus group. Most participants discussed other countries in a positive way and in the context of international cooperation and being concerned about other countries as well as their own.

It was unknown how participants would respond to the narrative which focused on international aspects of climate change, including global cooperation. However, it was received overwhelmingly positively. It was the only narrative where no words or phrases were highlighted as negative and was the most positively endorsed narrative overall, including ten participants highlighting the whole paragraph as positive. Although this narrative cuts across all the themes, the phrase “pressure our governments” was viewed particularly positively and has clear links to the power theme.

Outlying Narratives

The responses to some narratives did not fit into the main themes derived from the Framework analysis. These results are outlined below.

Narratives around protecting the environment/unity with nature and viewing humankind as intelligent/capable were viewed positively by participants. It was unknown how participants would respond to either of these. The narrative about protecting the environment/unity with nature received mainly positive feedback, with minimal words and phrases viewed as negative by a small number of participants. The phrases “protect and conserve the environment,” “humans have a connection to nature,” and “safeguard it” were seen as particularly positive, with over half of participants viewing the entire narrative as positive.

The response to the intelligent/capable narrative was mostly positive, with only a small number of individual participants highlighting words and phrases as negative. Just under half of participants viewed the whole narrative as positive, with the phrases “humankind has always been resourceful” and “have achieved great things” seen as particularly positive.

There were mixed opinions about the family security/safety, creativity, and health narratives. The family security/safety narrative was expected to be seen as positive and though it was to an extent, there were still disagreements. The phrase “I want my children and grandchildren to grow up in a safe and secure world” was the joint most positively received across all narratives (along with “we need to find creative and imaginative solutions” in the creativity narrative). The phrase “the safety and security of my family is important to me” also had positive responses. However, participants spoke about the need to be more international and care for others outside of their immediate family.

It was unknown whether the creativity narrative would be seen as positive or negative and though there were mixed opinions, most participants generally saw it as positive. The phrase “human ingenuity will succeed” was seen in quite a negative light and some people objected to the use of definitive language such as “will,” “ensure,” and “always” (which they saw as negative across a number of narratives). As noted above, the phrase “we need

to find creative and imaginative solutions” was the joint most positively received phrase across all narratives.

There was mixed feedback about framing climate change as a health issue, though it was generally seen as slightly more positive than negative. Phrases that were seen as particularly positive were “it poses a threat to human health” and “people are already dying and their health is being affected by the increase in heat, flooding and air pollution.” However, “safe drinking water,” “clean air,” and “a healthy future” were seen as negative by some as they felt that it was a generalisation to connect these to climate change and others felt that tackling climate change would not be enough on its own to address these issues.

DISCUSSION

As detailed in **Table 1**, half of the narratives used were expected to resonate with participants and half were unknown whether they would resonate with participants. This was based on existing research about values, language and framing (see Data collection). The results show mixed success with the narratives, though half of them got mostly positive responses from participants. Given the lack of research about climate change communication with older people and therefore some uncertainty around which narratives would be viewed as positive or negative, it is unsurprising that results were mixed. The results showed some distinctions between the overall framing (when participants spoke about or highlighted whole narratives) and the language used (related to specific words or phrases), as well as how these may relate to participants’ values. While framing and language were clearly visible in how participants responded to the narratives and in their wider discussion, the values that underpinned some of these were less obvious. However, values highlighted in the literature led to interesting discussions between participants around specific narratives (for example, legacy) and broader themes (responsibility).

One of the main areas that arose from the analysis was that participants felt it was important to think about and interact with others, both in relation to climate change and more generally, rather than having an individualistic outlook. This was reflected in the first half of the focus group as well as responses to many narratives including altruism and climate change as an intergenerational issue, contributing to existing literature on these topics. However, some participants wanting “better” rather than “the same” for future generations could be an important nuance in the language used.

The importance of volunteering and community implies that communicating in a way that emphasises working as a group to contribute towards a positive change may resonate with older people. Participants were mainly recruited through community groups, which could explain why this topic came up in discussions, however, it does reinforce some previous literature (Barnes et al., 2012). It is therefore unsurprising that there were positive responses to climate change being framed as a local and community-focused issue, supporting research in this area about general climate change engagement (Scannell and Gifford, 2013) and older people (Moser, 2017). The spiritual and social connectedness narrative which was received positively also encompassed community in a very broad sense.

The narratives which favoured a more insular framing had a lot of negative responses and further supports participants’ views that consideration and community were important. The findings from the security and safety narratives are significant because research suggested that these values are important to older people. However, these results demonstrate that safety and security were mostly seen as positive in relation to participants’ families, not when this was applied to a national context. Their reaction supports the strength of the community, consideration, and international themes. The results demonstrate that participants did think about the international aspects of climate change as well as at a more local, community level. The popularity of a more international framing has also been found in research with multiple segments of the British public where framing climate change as a shared global crisis and responsibility had positive responses (Wang et al., 2021b). The findings imply that both scales could both work well when communicating about climate change with older people.

Although the international narrative was the most positively endorsed narrative, the international outlook theme was the least mentioned out of all four themes. As noted in the Results section, this topic was raised only during the narratives section of the focus groups. As the first section of the focus groups did not mention climate change, it may be that an international outlook was only considered once the discussion focused on climate change rather than when discussing participants’ values and broader concerns. Also, four out of seven of the questions in the first part of the focus group specifically asked about their local community which is likely to be a factor as to why this topic was not raised until the narratives section. Therefore, given the popularity of the international narrative, the lower engagement with this theme should not be taken to mean that an international outlook was not a topic of importance for the participants.

The results suggest that participants wanted someone to take responsibility for climate change, though there was some difficulty in defining who that should be. Although this indicates that responsibility could be a complex theme to use in practice, there was broad agreement that government and organisations had the power and responsibility to act. This has also been reflected in research with people across the UK (Framing Climate Justice, 2020; Wang et al., 2020; Department for Business Energy Industrial Strategy, 2021) as well as for older people as consumers (De Jonquieres, 1993, cited by Sudbury and Simcock, 2009). This is important with regards to governments as the older generation has significant voting power and therefore potentially a greater political impact than other groups. This research reinforces the salience of this by providing some evidence that these participants saw the role of governments as being particularly important in relation to climate change. Also, the disagreements about blame and responsibility for climate change were to be expected given its complexity and the extent to which fossil fuels are embedded in society.

The positive responses to the protecting the environment/unity with nature narrative suggests that using this overall framing as well as language which emphasises people’s connection to nature and responsibility for protecting or looking after it could resonate with older people. Although it is important not to see climate change solely as an environmental issue, other

recent research has also found that nature framing worked well with some segments of the British public (Wang et al., 2021b).

The discussion about wealth and how this relates to justice and equality was an example of framing that caused some disagreement. The phrases marked negative in the social justice and equality narrative suggest that participants felt that the impacts of climate change would impact most people regardless of their financial situation. The negative reactions also suggest that participants felt everyone has some responsibility, regardless of the extent to which they contributed to climate change. However, the aspects of this narrative that were seen as positive support the theme of consideration and responsibility and therefore existing literature, as it shows that participants think that consideration of others is important.

Participants' disagreements are reflected in research which found that people in the UK have some difficulties in understanding how climate change can multiply oppression (Framing Climate Justice, 2020). Though the term "climate justice" was not used in the narrative, it is worth noting that research with young people across Europe found that it was not well-understood, despite having an understanding of the unequal impacts of climate change (Webster and Gellatly, 2021). Framing the social justice and equality narrative in a way that focused on solidarity would have been more appropriate and possibly more likely to have generated positive reactions around the responsibility element of the narrative (Framing Climate Justice, 2020). The results showed that this was the only narrative where there was a noticeable difference between the focus groups: all participants from the Borough of Camden felt positively towards the phrase "climate change will hit the poorest the hardest." Although it is not clear why this was the case, one possibility could be that they fit into the Progressive Activist segment described in Britain Talks Climate (who understand the impact of climate change on people that are poor or vulnerable; Wang et al., 2020), whereas the other groups had a broader range of participants.

The health narrative may have resonated more with participants had it been framed in a broader way as "creating a healthier society" (Wang et al., 2020, p. 5) rather than talking about specifics. Alternatively, linking it more closely to health issues that may impact the older generation could be a possible way to explore this further.

Focus groups were chosen as a research method as they allowed for social interaction and therefore group dynamics are likely to have influenced the way in which participants engaged with the questions and narratives. In all of the focus groups, there was a lot of interaction between participants, such as discussing topics that others had introduced. There were many times when participants explicitly said that they agreed with others' points of view, but also times when they stated that they disagreed. This suggests that the dynamics of the focus groups allowed for participants to express varying opinions as well as discuss topics raised by others that they may not have thought of or voiced themselves. This was useful as it allowed for more detailed insights than individual interviews or a survey, for example.

As Shaw and Corner (2017) point out, participants in Narrative Workshops should feel that the values they self-identify

with relate to their group identity, regardless of whether the values are also shared by others and are not exclusive to them. Therefore, some values are likely to be more widely applicable. Also as noted in previous literature, the older generation is an incredibly diverse demographic (Swift and Steeden, 2020) and language, values or framing that resonates with some older people should not be expected to do so for all. This has implications for the extent to which creating narratives for older people as a whole is effective or whether a more targeted approach could be more appropriate. For example, whether age or ethnicity would be the dominant factor in how older people of different ethnicities engage with climate change, or whether these would intersect in a way that would require a more targeted approach.

CONCLUSION

In recent years there has been an increasing awareness of the importance of communication with older people and their engagement with climate change, though there is still a way to go. Although a small amount of literature reflects some of the effective themes and narratives found in this research, it is mostly in relation to climate change communication in general or older people as consumers, rarely how to communicate with older people about climate change. Values, framing and language make up different aspects of climate communication but managing them together can be important. As this research has demonstrated, some climate change framing might be broadly effective but specific language may need to be avoided, such as the use of "same experiences" when communicating climate change as intergenerational. However, this may also relate to participants' values given that it is about legacy or it could be related to the value of altruism. This demonstrates that language, framing and values can overlap and cannot always be disentangled from one another. It is important to understand the underlying values of the older generation as this will inform the way in which climate change communication is tailored so that it may be more likely to resonate with them.

Climate change has arguably become a more visible issue in the UK recently, with climate emergency declarations, school strikes and protests, as well as increased media coverage (Majid, 2021) and the 26th Conference of the Parties (COP26) being held in Glasgow in 2021. Despite the COVID-19 pandemic, climate change is still seen as an urgent issue by the British public (Clemence and Skinner, 2021). Therefore, this may impact how older people respond to climate change communications compared to the time at which this research was conducted. This is important to note as the results (and any future research in this area) may be influenced by the prominence of climate change at particular points in time, and this may change how people engage with the topic. Changes in people's attitudes, beliefs and behaviours across all age groups which are prompted by major events are known as "period effects;" alternatively, changes can be due to "lifecycle effects" from aging or "cohort effects" where changes are linked to specific generations (Duffy, 2021).

There are some limitations to the research. The small sample size means that it cannot be generalised. Recruiting through

community groups and having a small number of participants recruited through snowballing could have led to the selection of those who are more engaged in their community and had similar views to each other, which may not be representative of this age group. Also, although the exact topic of the research was not disclosed apart from to a few participants who requested detailed information, all participants knew that the research was broadly environmentally focused. Therefore, this may have led to a more engaged group of participants than was aimed for.

As previously noted, older people are not a homogenous group and other identities and demographic factors may intersect with age (Swift and Steeden, 2020) in ways that could impact their engagement with climate change. For example, people living in rural areas of Britain are more engaged with climate change than urban citizens and there are some differences in attitudes between the two, such as their level of worry about being able to drive their petrol or diesel car and their level of support for renewable energy (Wang et al., 2021c). As the focus groups were county/borough-wide and therefore allowed for participants from both urban and rural areas, a direct comparison between older people living in rural and urban areas was not possible and there were no observable differences in the analysis according to factors other than age. As demographic information was not collected, it is not possible to state whether age was the driving factor behind the results or how age may have interacted with other demographic factors such as gender or ethnicity.

The findings have highlighted several areas of future development that would be of value to communications and public engagement research. While participants were part of a group discussion and therefore had access to other opinions, it was still a constructed situation outside of their everyday lives. Outside of a research setting, people encounter climate change messaging from a variety of different sources, messengers and contexts and there are no “magic messages” that will work of their own accord (Nisbet, 2019). Therefore, being able to test narratives in real world settings would be beneficial as this would expand on different aspects of how climate communication might work well with older people and provide stronger evidence in this area. Narratives that worked well could be further developed and tested (as intended with the Narrative Workshop methodology; Shaw and Corner, 2017), and the age group could be segmented as done in other research. Also, the location could be expanded to better align with UK-wide research rather than just England. As highlighted by Sabherwal and Kácha (2021), a lot of climate communications research has been limited to WEIRD (Western, Educated, Industrialised, Rich, Democratic) populations. Therefore, although this research addresses an important and largely missing demographic in this field, there

would also be great value in understanding this age group in other countries and cultural contexts.

Progress needs to be made to better include older people in the climate conversation and develop a greater understanding of how best to communicate and engage with this age group. This research contributes towards addressing this gap in the literature and provides some evidence towards what language, values and framing could work well with older people in England, as well as areas to potentially avoid and explore further. As well as contributing to the literature, this research has practical applicability in that it could be used to test and develop public communication and engagement strategies with older people.

DATA AVAILABILITY STATEMENT

The anonymised focus group transcripts are available from the corresponding author on reasonable request.

ETHICS STATEMENT

The studies involving human participants were reviewed and approved by Research Ethics Office at King's College London. The participants provided their written informed consent to participate in this study.

AUTHOR CONTRIBUTIONS

BL developed the ideas, methodology, carried out the research and analysis, and wrote and submitted the article.

FUNDING

Cardiff University paid the open access fee for this article.

ACKNOWLEDGMENTS

The author would like to thank all participants for their involvement, and Prof. Raymond Bryant for his support and guidance throughout the research. The author would also like to thank the Editor and two reviewers for taking the time and effort to provide helpful and considerate feedback which greatly improved the paper.

SUPPLEMENTARY MATERIAL

The Supplementary Material for this article can be found online at: <https://www.frontiersin.org/articles/10.3389/fcomm.2022.848671/full#supplementary-material>

REFERENCES

- Agarwal, A., and Narain, S. (2003). *Global Warming in an Unequal World: A Case of Environmental Colonialism*. 2nd ed. New Delhi: Centre for Science and Environment.
- Age UK (2019). *Later Life in the United Kingdom 2019*. United Kingdom: Age UK.

- Age UK (2021). *Age-Friendly Communities*. Available online at: <https://www.ageuk.org.uk/our-impact/politics-and-government/age-friendly-communities/>. (accessed December 3, 2021).
- Akenji, L., Bengtsson, M., Toivio, V., Lettenmeier, M., Fawcett, T., Parag, Y., et al. (2021). *1.5-Degree Lifestyles: Towards A Fair Consumption Space for All*. Berlin: Hot or Cool Institute.

- Andor, M. A., Schmidt, C. M., and Sommer, S. (2018). Climate change, population ageing and public spending: evidence on individual preferences. *Ecol. Econ.* 151, 173–183. doi: 10.1016/j.ecolecon.2018.05.003
- Badullovich, N., Grant, W. J., and Colvin, R. M. (2020). Framing climate change for effective communication: a systematic map. *Environ. Res. Lett.* 15:123002. doi: 10.1088/1748-9326/aba4c7
- Barnes, M., Harrison, E., and Murray, L. (2012). Ageing activists: who gets involved in older people's forums? *Ageing Soc.* 32, 261–280. doi: 10.1017/S0144686X11000328
- BBC (2019). *Climate Protests: Marches Worldwide Against Global Warming*. Available online at: <https://www.bbc.co.uk/news/world-49777279> (accessed December 2, 2021).
- Bedford, T., and Burgess, J. (2001). "The focus-group experience," in *Qualitative Methodologies for Geographers*, eds M. Limb and C. Dwyer (London: Arnold).
- Bell, K. (2021). "Diversity and inclusion in environmentalism," in *Routledge Studies in Environmental Justice*, ed K. Bell (Oxon, MD: Routledge).
- Berry, C., and Hunt, T. (2016). *The Rising Tide of Gerontocracy: How Young People Will Be Increasingly Outvoted*. The Intergenerational Foundation. Available online at: https://www.if.org.uk/wp-content/uploads/2016/02/The-Rising-Tide-of-Gerontocracy_Report_approved.pdf. (accessed December 3, 2021).
- Bryman, A. (2016). *Social Research Methods*. 5th ed. Oxford: Oxford University Press.
- Burgess, J. (2005). Follow the argument where it leads: some personal reflections on 'policy-relevant' research: Commentary. *Transact. Institute Br. Geograph.* 30, 273–281. doi: 10.1111/j.1475-5661.2005.00169.x
- Capstick, S., Khosla, R., and Wang, S. (2021). "Chapter 6. Bridging the gap – the role of equitable low-carbon lifestyles," in: *Emissions Gap Report 2020*. The Emissions Gap Report. Nairobi: United Nations Environment Programme. Available online at: <https://www.un-ilibrary.org/content/books/9789280738124c010> (accessed December 3, 2021).
- Carvalho, A., Russill, C., and Doyle, J. (2021). Editorial: Critical approaches to climate change and civic action. *Front. Commun.* 6, 711897. doi: 10.3389/fcomm.2021.711897
- Carvalho, A., van Wessel, M., and Maesele, P. (2017). Communication practices and political engagement with climate change: a research agenda. *Environ. Commun.* 11, 122–135. doi: 10.1080/17524032.2016.1241815
- Centre for Ageing Better, (2021). *#OlderAndGreener*. Available online at: <https://ageing-better.org.uk/older-and-greener> (accessed December 2, 2021).
- Clemence, M., and Skinner, G. (2021). *Public Concern About Climate Change and Pollution Doubles to a Near-Record Level*. Available online at: <https://www.ipsos.com/ipsos-mori/en-uk/public-concern-about-climate-change-and-pollution-doubles-near-record-level> (accessed December 3, 2021).
- Climate Outreach, (2016). *Climate Change Public Conversation Series: Desk Review*. Climate Outreach. Available online at: <https://climateoutreach.org/reports/scotlands-climate-change-public-conversations-series/> (accessed December 5, 2021).
- Committee on Climate Change, (2019). *Net Zero: The UK's contribution to stopping global warming*. UK: Committee on Climate Change. Available online at: <https://www.theccc.org.uk/publication/net-zero-the-uks-contribution-to-stopping-global-warming/> (accessed December 4, 2021).
- Corner, A., and Clarke, J. (2017). *Talking Climate: From Research to Practice in Public Engagement*. Switzerland: Springer Nature.
- Corner, A., Markowitz, E., and Pidgeon, N. (2014). Public engagement with climate change: the role of human values. *WIREs Climate Change* 5, 411–422. doi: 10.1002/wcc.269
- Department for Business Energy and Industrial Strategy (2021). *BEIS Public Attitudes Tracker (March 2021, Wave 37, UK)*. UK: Department for Business, Energy & Industrial Strategy. Available online at: <https://www.gov.uk/government/collections/public-attitudes-tracking-survey> (accessed July 14, 2021).
- Duffy, B. (2021). *Generations: Does When You're Born Shape Who You Are?* Great Britain: Atlantic Books.
- Evans, S. (2021). *Analysis: Which Countries Are Historically Responsible for Climate Change?* Carbon Brief 5 October. Available online at: <https://www.carbonbrief.org/analysis-which-countries-are-historically-responsible-for-climate-change> (accessed December 4, 2021).
- Framing Climate Justice, (2020). *Framing Climate Justice Research Briefing: How People in the UK Think About Climate Justice*. Framing Climate Justice. Available online at: <https://framingclimatejustice.org/resources/> (accessed December 2, 2021).
- Frumkin, H., Fried, L., and Moody, R. (2012). Aging, climate change, and legacy thinking. *Am. J. Public Health* 102, 1434–1438. doi: 10.2105/AJPH.2012.300663
- Geertz, C. (1973). *The Interpretation of Cultures*. New York, NY: Basic Books.
- Gephart, R. P. (2019). "Qualitative research as interpretive social science," in *The SAGE Handbook of Qualitative Business and Management Research Methods: History and Traditions* (London: SAGE Publications Ltd).
- Greener and Wiser Taskforce, (2009). *Greener and Wiser: An Older People's Manifesto on the Environment*. London: Green Alliance.
- Haq, G. (2021). "The forgotten generation: older people and climate change," in *Diversity and Inclusion in Environmentalism. Routledge Studies in Environmental Justice*, ed K. Bell (Oxon: Routledge).
- Haq, G., Minx, J., Whitelegg, J., and Owen, A. (2007). *Greening The Greys: Climate Change and the Over 50s*. Stockholm Environment Institute. Available online at: <https://www.sei.org/publications/greening-greys-climate-change-50s/> (accessed December 5, 2021).
- Hennink, M. M., and Kaiser, B. N. (2020). "Saturation in qualitative research," in *SAGE Research Methods Foundations*, eds P. Atkinson, S. Delamont, A. Cernat, J. W. Sakshaug, and R. A. Williams. doi: 10.4135/9781526421036822322
- Hermwille, L. (2016). The role of narratives in socio-technical transitions—Fukushima and the energy regimes of Japan, Germany, and the United Kingdom. *Energy Res. Soc. Sci.* 11, 237–246. doi: 10.1016/j.erss.2015.11.001
- Hickman, C., et al. (2021). Young people's voices on climate anxiety, government betrayal and moral injury: a global phenomenon. *Lancet Planetary Health*. 2021:23. doi: 10.2139/ssrn.3918955
- Hill, A. (2021). *Generational Conflict Over Climate Crisis is a Myth, UK Study Finds*. Available online at: <https://www.theguardian.com/environment/2021/sep/15/generational-conflict-over-climate-crisis-is-a-myth-uk-study-finds> (accessed December 5, 2021).
- Howarth, C., and Parsons, L. (2021). Assembling a coalition of climate change narratives on UK climate action: a focus on the city, countryside, community and home. *Clim. Change* 164:8. doi: 10.1007/s10584-021-02959-8
- IPCC (2021). *Climate Change Widespread, Rapid, and Intensifying*. Available online at: <https://www.ipcc.ch/2021/08/09/ar6-wg1-20210809-pr/> (accessed December 4, 2021).
- Jones, A., and Hiller, B. (2021). *Why the Climate Movement Must Do More to Mobilise Older People. The Conversation*. Available online at: <https://theconversation.com/why-the-climate-movement-must-do-more-to-mobilise-older-people-161732> (accessed December 4, 2021).
- Majid, A. (2021). *Press Coverage of Climate Change Analysed by Country: UK and Australia Rank Top. Press Gazette*. Available online at: <https://pressgazette.co.uk/press-coverage-of-climate-change-analysed-by-country-uk-and-australia-rank-top/> (accessed December 5, 2021).
- Moser, S. C. (2017). Never too old to care: reaching an untapped cohort of climate action champions. *Public Policy Aging Rep.* 27, 33–36. doi: 10.1093/ppar/prw029
- NatCen Social Research, (2022). *Leaders in Qualitative Analysis*. Available online at: <https://natcen.ac.uk/our-expertise/methods-expertise/qualitative-framework/> (accessed March 2, 2022).
- Nisbet, M. C. (2019). *Sciences, Publics, Politics: The Limits of Strategic Messaging*. Available online at: <https://issues.org/the-limits-of-strategic-messaging/> (accessed December 3, 2021).
- Office for National Statistics (2011). *2011 Census*. Available online at: <https://www.nomisweb.co.uk/census/2011> (accessed December 5, 2021).
- Office for National Statistics (2021). *Overview of the UK Population: January 2021*. Available online at: <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/articles/overviewoftheukpopulation/january2021#the-uks-population-is-ageing> (accessed December 5, 2021).
- O'Leary, Z. (2012). *The Essential Guide to Doing Your Research Project*. 5th ed. London: SAGE Publications Ltd.

- Paavola, J. (2017). Health impacts of climate change and health and social inequalities in the UK. *Environ. Health* 16:113. doi: 10.1186/s12940-017-0328-z
- Patterson, J., Wyborn, C., Westman, L., Brisbois, M. C., Milkoreit, M., and Jayaram, D. (2021). The political effects of emergency frames in sustainability. *Nat. Sustainab.* 4, 841–850. doi: 10.1038/s41893-021-00749-9
- Pearce, W., Brown, B., Nerlich, B., and Koteyko, N. (2015). Communicating climate change: conduits, content, and consensus. *WIREs Clim. Change* 6, 613–626. doi: 10.1002/wcc.366
- Pillemer, K., Cope, M. T., and Nolte, J. (2021). *Older People and Action on Climate Change: A Powerful But Underutilized Resource*. HelpAge International.
- Sabherwal, A., and Kácha, O. (2021). Communicating climate change beyond western societies: a tale of the Czech Republic and India. *Cambridge J. Sci. Policy* 2:9. doi: 10.17863/CAM.65442
- Scannell, L., and Gifford, R. (2013). Personally relevant climate change: the role of place attachment and local versus global message framing in engagement. *Environ. Behav.* 45, 60–85. doi: 10.1177/0013916511421196
- Schäfer, M., and O'Neill, S. (2017). *Frame Analysis in Climate Change Communication*. The Oxford Encyclopedia of Climate Change Communication. Oxford: Oxford Research Encyclopedia (Climate Science). doi: 10.1093/acrefore/9780190228620.013.487
- Schewe, C. D. (1990). Get in position for the older market. *American Demographics*. 12, 6
- Schwartz, S. H. (1992). *Universals in the Content and Structure of Values: Theoretical Advances and Empirical Tests in 20 Countries*. Elsevier, pp. 1–65. doi: 10.1016/S0065-2601(08)60281-6
- Schwartz, S. H. (1994). Are there universal aspects in the structure and contents of human values? *J. Soc. Issues* 50, 19–45. doi: 10.1111/j.1540-4560.1994.tb01196.x
- Shaw, C., and Corner, A. (2017). Using Narrative Workshops to socialise the climate debate: Lessons from two case studies – centre-right audiences and the Scottish public. *Energy Res. Soc. Sci.* 31, 273–283. doi: 10.1016/j.erss.2017.06.029
- Skinner, G., Mortimore, R., and Spielman, D. (2019). *How Britain Voted in the 2019 Election*. Available online at: <https://www.ipsos.com/ipsos-mori/en-uk/how-britain-voted-2019-election> (accessed December 4, 2021).
- Smyer, M. A. (2017). Greening gray: climate action for an aging world. *Public Policy Aging Rep.* 27, 4–7. doi: 10.1093/ppar/prw028
- Sudbury, L., and Simcock, P. (2009). Understanding older consumers through cognitive age and the list of values: A U.K.-based perspective. *Psychol. Market.* 26, 22–38. doi: 10.1002/mar.20260
- Swift, H. J., and Steeden, B. (2020). *Exploring Representations of Old Age and Ageing*. Centre for Ageing Better. Available online at: <https://ageing-better.org.uk/sites/default/files/2020-03/Exploring-representations-of-old-age.pdf> (accessed December 5, 2021).
- Tam, K., Leung, A. K., and Clayton, S. (2021). Research on climate change in social psychology publications: A systematic review. *Asian J. Soc. Psychol.* 24, 117–143. doi: 10.1111/ajsp.12477
- UNDP and University of Oxford (2021). *Peoples' Climate Vote*. Available online at: <https://www.undp.org/publications/peoples-climate-vote> (accessed December 5, 2021).
- Veland, S., et al. (2018). Narrative matters for sustainability: the transformative role of storytelling in realizing 1.5°C futures. *Curr. Opin. Environ. Sustain.* 31, 41–47. doi: 10.1016/j.cosust.2017.12.005
- Wang, S., Corner, A., and Nicholls, J. (2020). *Britain Talks Climate: A Toolkit for Engaging the British Public on Climate Change*. Oxford: Climate Outreach. Available at: <https://climateoutreach.org/reports/britain-talks-climate/>
- Wang, S., Hurlstone, M. J., Leviston, Z., Walker, I., and Lawrence, C. (2021a). Construal-level theory and psychological distancing: Implications for grand environmental challenges. *One Earth* 4, 482–486. doi: 10.1016/j.oneear.2021.03.009
- Wang, S., Latter, B., Nicholls, J., Sawas, A., and Shaw, C. (2021b). *Britain Talks COP26: New Insights on What the UK Public Want From the Climate Summit*. Oxford: Climate Outreach.
- Wang, S., Shaw, C., Randall, A., and Marshall, G. (2021c). *Equipping UK Rural Councillors to Engage With Their Communities*. Oxford: Climate Outreach. Available at: <https://climateoutreach.org/reports/rural-attitudes-climate-uk/>
- Webster, R., and Gellatly, J. (2021). *Young Europeans Say We Need System Change to Tackle Climate Change – But Most Don't Know What 'Climate Justice' Means*. Climate Outreach. Available online at: <https://climateoutreach.org/young-people-europe-climate-justice-spark/> (accessed December 3, 2021).
- Whitmarsh, L., and Capstick, S. (2018). *Perceptions of Climate Change. Psychology and Climate Change*. Elsevier.
- Whitmarsh, L., Lorenzoni, I., Aruta, J. J. B., and Day, S. (2021). Commentary: Progress in understanding and overcoming barriers to public engagement with climate change. *Glob. Environ. Change* 71:102403. doi: 10.1016/j.gloenvcha.2021.102403
- Wickersham, R. H., Zaval, L., Pachana, N. A., and Smyer, M. A. (2020). The impact of place and legacy framing on climate action: A lifespan approach. *PLoS ONE* 15, e0228963. doi: 10.1371/journal.pone.0228963
- Wolfe, D. B. (1994). Targeting the mature mind. *American Demographics*. 16, 3.

Conflict of Interest: The author declares that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Publisher's Note: All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers. Any product that may be evaluated in this article, or claim that may be made by its manufacturer, is not guaranteed or endorsed by the publisher.

Copyright © 2022 Latter. This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY). The use, distribution or reproduction in other forums is permitted, provided the original author(s) and the copyright owner(s) are credited and that the original publication in this journal is cited, in accordance with accepted academic practice. No use, distribution or reproduction is permitted which does not comply with these terms.