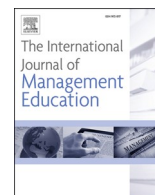


Contents lists available at [ScienceDirect](https://www.sciencedirect.com)

The International Journal of Management Education

journal homepage: www.elsevier.com/locate/ijme

Management actions to address the climate emergency: Motivations and barriers for SMEs and other societal micro/ meso-level groups

Simon O'Leary^{a,*}, Sarah Lieberman^a, Agnes Gulyas^a, Matthew Ogilvie^a,
David Bates^a, Theresa Heath^b, Christopher Pelz^c, Sitira Williams^d, Danielle Shalet^a

^a Canterbury Christ Church University, North Holmes Road, Canterbury, Kent, CT1 1QU, UK

^b Loughborough University London, Olympic Park, London, E20 3BS, UK

^c University College London, Gower St, London, WC1E 6BT, UK

^d Limitless Research, Park Lane Business Centre, Nottingham, NG6 0DW, UK

ARTICLE INFO

Keywords:

Climate
Motivations
Barriers
Sustainability
Societal groups

ABSTRACT

Initiatives to tackle the climate emergency have tended to focus on large-scale actions that governments and investors (societal macro-levels) can take and smaller-scale individual habits, with limited attention given to the groups that form society between those ends of the spectrum (societal micro/meso-levels). This research aims to traverse that gap by studying three societal micro/meso-level groups; from the private, public and voluntary sectors, as represented by business, community and campaign groups. Existing literature and focus groups are used to identify what motivates actions on climate change, while exposing barriers that may drive choices of inaction. The study shows that concerns for the future and personal ethics play vital roles across business, community and campaign groups, while the principal barriers include difficulties in accessing support schemes and changes in political priorities. Better networking and knowledge exchange are considered essential for meaningful progress. This provides a new framework for management education to support organisations in tackling climate-related issues. Action guides may be developed and task-forces trained to provide hands-on support, especially for SMEs and local communities. The enthusiasm of younger people and campaigners, combined with others' experiences, would create a powerful platform for climate emergency actions.

1. Introduction

There is widespread acceptance that the human race faces a climate emergency (Gutteres, 2022) and many nations have set specific, though often non-binding, goals for carbon dioxide emissions in response to international organisations such as the 2015 United Nations Paris Agreement and the Sharm el-Sheikh Climate Change Conference COP27, where close to 200 countries agreed to continue reducing global greenhouse gas emissions and to provide suitable financing to developing countries. The aim of this study is

* Corresponding author.

E-mail addresses: simon.oleary@canterbury.ac.uk (S. O'Leary), sarah.lieberman@canterbury.ac.uk (S. Lieberman), agnes.gulyas@canterbury.ac.uk (A. Gulyas), matthew.ogilvie@canterbury.ac.uk (M. Ogilvie), david.bates@canterbury.ac.uk (D. Bates), t.heath@lboro.ac.uk (T. Heath), chris.pelz93@icloud.com (C. Pelz), sitira_w@yahoo.com (S. Williams), danielle.shalet@canterbury.ac.uk (D. Shalet).

<https://doi.org/10.1016/j.ijme.2023.100831>

Received 21 December 2022; Received in revised form 29 May 2023; Accepted 5 June 2023

Available online 17 June 2023

1472-8117/© 2023 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY license (<http://creativecommons.org/licenses/by/4.0/>).

to identify areas of opportunity in the business world and elsewhere where further actions could help ameliorate this situation.

On issues of such a global nature, social science research often addresses three different levels of analysis, at the micro, meso, and macro levels (Babbie, 2013; Serpa & Ferreira, 2019). In the ongoing global climate emergency, there has been much focus on large-scale actions that governments and large organisations can take at societal macro-levels, as well as on series of smaller-scale actions that individuals can take. This is reflected in the business world, where climate emergency attention has tended to focus on the larger companies with over 250 employees, but relatively limited attention has been given to the smaller business groups with 1–249 employees at the micro/meso levels (Molthan-Hill et al., 2020). In the United Kingdom (UK), a similar number of people are employed in those smaller businesses as work in larger businesses (Statistica, 2022; Office for National Statistics, 2022). Therefore, effective management education on the motivations for, and barriers against, undertaking actions on climate emergency initiatives in those smaller businesses could be expected to play a key role in achieving the UK's aim for net-Zero by 2050 (UK Government, 2021).

Such macro, meso, and micro level entities also exist in the public sector when comparing, for example, national Government Departments and County Councils with more local community and campaign groups. As a comparator for the research here with private businesses, these relatively smaller public sector groups also form part of the study as an opportunity to identify similarities and differences. Interdisciplinary literature reviews are used to assess existing knowledge in each of these fields, and three focus groups of representatives of private businesses, community bodies, and campaign groups from the south-east of England are used to identify those factors that motivate actions on climate-related issues and those that form barriers against such actions.

The potential impact of the study is in raising awareness about the key drivers for, and barriers against, taking climate-related actions in three samples of micro/meso-level societal groups. The opportunity exists to compare and contrast the findings from private businesses with those of public community bodies and voluntary campaign groups. The conclusions drawn could influence management education delivery, as well as local and national policy and organisational practices.

2. Literature

Climate is one of the 17 global Strategic Development Goals (United Nations, 2022) and, in the business world, responsible management education is cited as an essential foundation for effective progress on such issues (Beddewela et al., 2017; Parkes, 2017). This literature review focuses on what motivates individuals and groups generally, prior to more detailed appraisals of the specific motivations for business, community and campaign groups.

Motivation is a set of processes that helps complete goal-directed behaviours and, without motivational resources such as effort, tasks may not be completed. Motivation is important for many species (Oemisch et al., 2016; Rygula et al., 2015) and multiple types of human motivation exist (Stavrinoudis & Kakarougkas, 2018). These include intrinsic and extrinsic motivation, potential motivation, achievement motivation and motivation intensity, while issues such as emotion add to the complexity (Harmon-Jones, 2019; Lang & Bradley, 2010) and support the notion that fear can lead to environmental inaction (Stern, 2012).

Potential motivation suggests that there is a maximum effort that an individual is willing to exert to achieve a goal, as reflected in academic attainment among students (Scales et al., 2020). Achievement motivation considers that positive and negative feelings become associated with goal accomplishment (Miner, 2005) and reinforce the associated behaviours to establish a sense of competitiveness, while motivation intensity signals the level of effort expended by the individual to achieve a goal. Understanding motivation is important for appreciating the psychology that governs behaviour. The more difficult part is influencing behavioural change, as it may require perception reframing. Group motivation is more complicated as individuals across the group differ and therefore group leadership is important in creating a collaborative, structured and communicative environment. This requires good understandings of team members, clear goals and leadership consistency, particularly at times of crisis (Hertelendy et al., 2021; Rubens et al., 2018).

The following sections note the barriers and incentives associated with behaviours linked to the adoption of climate change mitigation strategies by each of the three groups. It is worth noting some key differences between the groups:

- In business, each individual in the group is employed with a defined and remunerated role, and the business itself is focused on specific products and services.
- Community group members are typically interested local volunteers, with some paid administrators. They bring a range of expertise that may be called upon for different issues.
- Campaign groups tend to exist relatively briefly, focus on a specific issue and evolve over time. The members are interested volunteers and could be more in touch online than face-to-face.

Given these differences, it may be expected that each group is motivated differently towards a global issue such as the climate emergency and it is this which forms the framework for this research.

2.1. Business groups

Most registered businesses worldwide, and the largest employers, are small and medium enterprises (SMEs) who represent 90% of businesses and account for more than 50% of employment worldwide (World Bank, 2023). It is these smaller business entities that form the focus of this study. Important issues include access to resources, individual values and issue perceptions, as well as the motivators of and barriers to climate actions.

2.1.1. Access to resources

Many studies have demonstrated the importance of relevant funding and support to develop SMEs (Doh & Kim, 2014; Dvoulety et al., 2021; Park et al., 2020) but funders tend to associate their smaller scale with risk and uncertainty (Alvarez Jaramillo, Zartha Sossa, & Orozco Mendoza, 2019; Andries et al., 2018). This creates a major issue for global issues such as the climate emergency (Ghisetti et al., 2017; Manzoor et al., 2021) and the adoption of sustainable practices in business models. Collaborations between SMEs has been demonstrated to improve sustainability engagement within business communities (Williams and Schaefer, 2013) and this could provide a platform for peer-support in the absence of major funding.

2.1.2. Individual values

The owners and managers of SMEs have a key role in how to balance the desire for economic growth in the light of sustainability issues such as the climate emergency. Hampton et al. (2022) find that the economic arguments tend to be prioritised and that, unless sustainability practices could be linked to either improved growth or reduced costs (Busch et al., 2020), conflicts often arose between employees based on their personal and professional values. Nevertheless, inaction does not always reflect a lack of interest in environmental engagement (Cassells & Lewis, 2011) and, often, SME managers want to incorporate sustainability into their business models but do not have the resources to do so.

2.1.3. Perceptions of climate change

SMEs represent a large and varied group of businesses where climate-related issues could have a range of impacts from very little to very large depending on, for example, how much electricity the business requires or how many vehicles it uses. Nevertheless, how climate change is perceived is likely to impact upon any actions taken. If SMEs perceive actions to be costly or its impact only limited, then hesitancy can be expected. However, it is also important that SMEs do not feel that the issue is so large that there is nothing that they can do about it. Therefore, the sharing of climate action plans can be an effective method for communicating ideas and approaches that could both enhance growth and save costs (Harries et al., 2018; Kaesehage et al., 2014; Mayer & Smith, 2019; North & Nurse, 2014). If the challenge of the climate emergency is framed in a way that communicates mitigable danger, it is likely that more SMEs would be inclined to engage in suitable practices. Wright and Nyberg (2017) argue that SMEs need to focus more explicitly on understanding issues from a financial perspective and as a potential business opportunity to reduce costs and mitigate impact on the environment. Indeed, Allen and Craig (2016) signal that the R of CSR (Corporate Social Responsibility) should stand for Responsiveness, as it would focus on actions rather than rhetoric.

2.1.4. Motivators and barriers

Limited access to resources, ranges of individual values and climate change perceptions form the basis of the key motivators and barriers to actions on the climate emergency in business groups, particularly SMEs. Access to resources is the greatest barrier towards sustainable development generally, due to factors such as investment risks, uncertainty with payoffs, and a lack of implementation funding. To incentivise action, the nature of the communication of the climate emergency is critical, as is establishing support networks and digestible, actionable guidance on what to do next (Attari et al., 2009; Bennett & Ramsden, 2007; Petts, 2017; Pickernell et al., 2013; Wakabayashi & Arimura, 2016).

2.2. Community bodies

Community bodies are defined here as groups of mainly voluntary people, such as those on local councils or in local support groups. These community groups provide a public sector contrast to the work on private businesses. Many such community groups focus on the broader picture of sustainability education and activity rather than the specifics of the climate emergency. Several climate-related initiatives undertaken across the UK provide insights.

2.2.1. Larger public bodies across the UK

Public-sector climate emergency initiatives in the UK are often housed under a broader sustainability umbrella. Some of the large public bodies, such as Kent County Council, reflect the climate emergency in their mission statement and set up a framework of a Energy and Low Emissions Strategy with a focus on a target of net zero emissions by 2050 for Kent and Medway. This includes actions to cut greenhouse gas emissions through changes to its highway lighting, council buildings, transport fleet and business travel, as well as planting trees. Similarly, Devon County Council is working towards a net zero carbon plan that includes local councils as well as community groups, with a series of groups and task forces set up to take the lead, including academic, environmental and health agencies, as well as economic representatives, who also deliver community workshops on tackling the climate emergency using animations, poems, illustrations, mobile games, public murals and augmented reality commissions. North Yorkshire County Council's climate manifesto refers to community actions and seeks to become net-neutral by 2030 by working closely with district councils and communities to encourage residents to take action to reduce carbon footprints. The Council also provides community members with the education needed to support their action plan, including a glossary of the meaning of relevant terms and a variety of activities to educate young people on climate issues and how they can make a difference. This comes complete with a mascot named 'Power Down Pete' to encourage young people to take part in climate action, and it provides schools with information and activities to run. They are also engaged with partners in York and North Yorkshire Local Enterprise Partnerships to develop, implement, and support projects that will assist others to significantly reduce carbon footprints and have other positive environmental impacts. Nottingham County Council declared a climate emergency in 2021 and is working towards becoming carbon neutral in 2030. The plan includes involving the

community and thousands responded to a public survey about the priorities.

These examples illustrate a whole range of initiatives that are underway, many of which are funded but many of which are not, or are only partially funded, and often rely on local community groups for implementation. Community funding is therefore an important factor and two funds appear to have a notable impact on climate emergency actions: The National Lottery Climate Action Fund and the WWF Community Climate Action fund. Initiatives include support for the organisation of community climate awareness events, discussions and creative workshops to educate the community on climate actions and to promote actions on issues such as transport, heating and beyond.

2.2.2. Challenges

There appears to be a gap between the rhetoric and action on the climate emergency (Howarth et al., 2020), it being described as a 'slow emergency', in part due to mixed messages at local levels and a lack of resource, skill, and capacity to deliver meaningful responses to major emergencies (Galaz et al., 2017; McHugh et al., 2021; Nohrstedt et al., 2021). It appears that, if community members are educated and informed on where best to find advice on climate emergency actions, communities could make a much bigger impact and community participation and involvement in climate action and sustainability would be enhanced. The United Nations (UN) itself has much information available on climate action and how communities can engage in it successfully. This includes Youth in Action, listing actions that young people can engage in to become more active in combating the climate crisis, including calculating your carbon footprint, joining up with like-minded peers, online courses about climate, and onward communications through social media. Existing evidence suggests that climate emergency issues require greater prioritisation by national governments, as reflected in their policies and funding streams, to effect real leadership for community climate actions (Howarth et al., 2020).

2.3. Campaign groups

Campaign groups may be considered people who share common interests, self-awareness and culture to engage authorities in discussions that would lead to change (Corry & Reiner, 2021). In popular culture though, campaign groups are often described as activists who lead various protests to thwart initiatives that they do not want locally (Schwenkenbecher, 2017) or more broadly, as reflected in the 'Just Stop Oil' campaign of direct action against UK oil infrastructure such as petrol stations, oil depots and refineries (Gayle, 2022). Such campaign groups often show unity by moving, singing, chanting and marching together in ranks, often risking jobs, benefits and arrest (Delina & Diesendorf, 2016; Wainwright, 2006). Such campaigns may be categorised according to three overarching perspectives: Not in my back yard; Place protection; and Social movement.

2.3.1. Not in my back yard (NIMBY) and place protection

NIMBY concerns local protesters who oppose infrastructure projects in their vicinity in a bid to preserve the integrity of the area (Schwenkenbecher, 2017), the term having emerged in the United States based on the initiative of an American Nuclear Society member (Burningham et al., 2006). NIMBY ideology suggests that, while its members may be positive towards an innovation, such as new housing or wind turbines for example, they object to its proposed siting. NIMBY groups are often criticised for irrationality and for using incomplete or wrong information (Perkins & Mihaylov, 2015). Devine-Wright (2009) proposes that the knowledge gap could be bridged through increased awareness campaigns about the positive impacts of new infrastructure in the community. However, some campaigns also become tainted if they are associated with the term NIMBY (Burningham et al., 2006), campaigners feeling that they would have made more progress if had dissociated themselves from NIMBY and focused on the preservation of environmental and social values rather than perceptions of personal interest.

Place protective action is a form of NIMBY and has been linked to strong attachments to traditional housing and lifestyle. Residents often oppose new infrastructure developments for reasons such as loss of green space, erosion of area character, undesirable influx of outsiders into local communities, disruptions to the usual way of life, reduced access to schools, health centres, parks and other local amenities, and increased traffic on the roads (Devine-Wright, 2009; Powe & Trevor, 2011). The more attached residents feel to an area, the more the tendency to oppose a project in their community to protect the sanctity or serenity of the locality (Astor, 2016).

2.3.2. Social movements

Social movements may be defined as a form of collective organised activities designed to influence the political atmosphere (Jamison, 2010) on issues such as climate change. Tilly (2008) argues that protests and social movements are successful when they display worthiness, unity, numbers, and commitment. Worthiness refers to the perceived seriousness of the group. Unity refers to the synergy and cooperation within the group. Numbers refers to the size of the campaign group. Commitment refers to how much sacrifice group members are willing to make. The environmental justice movement emerged in marginalised and polluted communities (Perkins & Mihaylov, 2015; Schlosberg, 2004), defining environmental justice in three ways: Equal distribution of environmental risk; Acknowledgment of diversity; and Involvement in the processes that influence environmental policies. Although social movements with an environmental focus often form alliances for maximum effect, climate change has such a wide impact that it makes a coordinated approach difficult (Jamison, 2010).

3. Methodology

Three focus groups, with representatives from business, community, and campaign groups, were conducted to assess the current thinking of these examples of societal micro/meso-level groups. The focus group approach is commonly used to access the views of

under-represented entities as it allows for open discussions about perceptions, ideas, opinions, and thoughts (Krueger & Casey, 2000). Focus groups also offer flexibility (SIS International Research, 2023) and, as the research aims to examine how groups collectively engage on climate-related issues, this method also helps study group dynamics and behaviour. This approach also gathers information in a relatively short space of time, and ongoing Covid-19 pandemic limitations drove the decision to hold them online.

Participants were selected using convenience and purposive sampling, and all were located in Kent and South-East UK. The business and community participants were targeted due to their perceived suitability for the project, while the campaign participants were predominantly selected due to an existing relationship with one of the principal researchers. These approaches have their limitations as they introduce elements of potential bias in those invited to join the focus groups. Nevertheless, it is hoped that some broad conclusions can be drawn from these three focus groups, leading to further more specific and focused research. The three focus groups may be described as follows:

- 'Business group' covers businesses with less than 250 employees, commonly referred to as a SME (Small & Medium Enterprise).
- 'Community group' includes groups of people with a common interest who would likely identify or describe themselves as a community group.
- 'Campaign group' is defined as a group actively campaigning on a particular issue. Here, due to the self-selecting nature of the participants, all were involved in environmental work.

Two hundred potential participants were emailed (100 community, 68 business, and 32 campaign), with a third receiving follow-up clarification phone calls. A small incentive of a £15 voucher was offered to all participants and, ultimately, 17 attended the sessions (6 community, 5 business, and 6 campaign).

Based on the project aim to determine the motivations and barriers to climate emergency action, a list of questions and topics (Appendix 1) was formulated prior to the focus groups. These were structured to ensure that the key aims of the research were addressed but allowed the flexibility for free-flowing conversation. Questions were asked in a conversational manner, consistent with characterisations of the focus group as a social experience. The focus groups ran in July 2022 and transcriptions were used to identify common threads and themes. Quotations that support those threads and themes are outlined in the findings and further quantitative assessments are used to provide a broad illustration of the strengths of feeling on various issues.

The business participants came from a range of SMEs in various sectors, including construction, streaming services and accommodation. Community participants were from community centres, religious organisations and a senior social group. Some campaign participants knew each other through environmental group affiliations and their campaigns focused on the natural environment,

Table 1
Climate-related activities and support needs across the three focus groups.

Current activities	Business		Community		Campaign		Total	
Infrastructure and technology	8	29%	4	8%	10	23%	12	10%
Campaigning	1	4%			3	7%	11	9%
Community hub			8	16%	10	23%	10	8%
Political					2	5%	7	6%
Establishing strategies	5	18%	5	10%			5	4%
Ethical practices			2	4%			2	2%
Fundraising								
Organisational focus	14	50%	19	39%	25	58%	58	48%
Awareness education			5	10%	12	28%	17	14%
Vulnerable groups	1	4%	7	14%			8	7%
Lifestyle modifications	2	7%	3	6%			5	4%
Assistance activities	4	14%					4	3%
Helping other people	7	25%	15	31%	12	28%	34	28%
Recycling	5	18%	9	18%	2	5%	16	13%
Natural environment	2	7%	6	12%	4	9%	12	10%
Supporting the environment	7	25%	15	31%	6	14%	28	23%
Current activities	28	100%	49	100%	43	100%	120	100%
Support required	Business		Community		Campaign		Total	
Specialist support and guidelines	5	42%	4	33%			9	26%
Collaboration	2	17%			5	45%	7	20%
Personnel			5	42%	2	18%	7	20%
Financial	2	17%	2	17%			4	11%
Practical help	9	75%	11	92%	7	64%	27	77%
Political change	3	25%	1	8%	4	36%	8	23%
Policy landscape	3	25%	1	8%	4	36%	8	23%
Support required	12	100%	12	100%	11	100%	35	100%

marine ecology, clean air and local eco-projects. All participants were already actively engaged in various sustainability matters and most were keenly aware of climate change. The sample was self-selecting and future studies may need to consider those with less direct interest in environmental issues. The participants were a cross-generational group of 14 females and 3 males from Kent and South East UK.

Given the case-study style nature of this study, it is important to note the limitations of such research. As noted by Flyvbjerg (2006) and Yin (2003), well-conducted case studies make valuable contributions to social science research but the bigger picture is formed when larger studies are used to complement those specialised case studies. Larger samples typically provide breadth but lack depth, while case studies give depth but little breadth. Therefore, both are needed for a sound overall study and it is often a combination of qualitative and quantitative methods that help complete the picture. While the case studies here provide rich material, further studies are required, as outlined later.

4. Findings

The findings about these three societal micro/meso-level groups are outlined in several parts, starting with their existing climate-related activities and challenges, followed by their group motivations for, and barriers against, further climate emergency actions.

4.1. Existing climate-related activities and challenges

Table 1 outlines the number of times that each group commented on the climate-related activities that they are engaged in, and the areas where support is needed. It does not quantify the depth of those activities or needs and the aim is to provide a backdrop for the qualitative commentaries that follow.

This provides a backdrop for the commentaries that follow and is not a quantification of the depth of activities or needs.

In broad terms, it appears that each group has a balanced approach on internal and external climate-related matters, as reflected in the overall organisational focus (48%) and the attention given to helping others and the environment (52%). Though variations exist across the three groups, it is interesting to note the internal and external approach in each. In terms of support needs as well, it is clear that it is practical help overall (77%) that is now required by each group. The following sections expand upon such issues for each of the three groups studied.

4.1.1. Business group activities

Modifying its infrastructure and technology were cited as the most common existing action by businesses, and most activities were covered by this and three other activities; recycling, environmental strategies, and assistance for others. Examples given included energy-efficient air-conditioning units, utilising LED-lighting, harvesting of rainwater, recycling, using sustainable paper for promotions, collaborating with a local solar farm for electricity, and introducing permaculture principles into community gardens. Such activities raised awareness both internally and externally.

‘... did a permaculture course ... not digging and using heaps of mulch and putting in loads of plants for wildlife. ... high street property ... getting hedgehogs and ...more birds and frogs ... local people are noticing ...’

Strategising, and implementing environmental plans was also a strong theme, with participants discussing ideas for showcasing how local businesses were actively engaging in environmental issues, or providing small loans to enable communities to launch environmental projects.

4.1.2. Community group activities

A broad range of climate-related activities already exist across community groups, ranging from recycling, to community hubs, helping vulnerable groups, supporting the environment, and raising awareness. In some cases, an environmentally-friendly lifestyle was something learned from childhood:

‘I’m secretary of a retirement group ... members ... a lot of them in their eighties ... we don’t have an environmental policy as such, but we come from the generation of make, do, reuse, mend ... we’re probably the original eco warriors.’

Others set up repair cafes, ran sustainability workshops, educated, organised food banks, and taught vulnerable people how to cook healthily on a budget. Participants were highly socially aware and protective of others. Poverty and costs were frequently mentioned, and workshops often targeted this issue. Many themes overlap, and community work and everyday behaviour were seen as integrated.

4.1.3. Campaign group activities

The most common action of campaign groups was in raising awareness, and most activities were covered by this, campaigning about environmental issues, and associated political actions. Raising awareness and campaigning overlapped, with participants describing campaigns to raise awareness about vehicle pollution, protecting natural habitats and marine conservation. Participants also discussed petitions and organising with communities and political groups. Political engagement included local politics and the Green Party, lobbying government and councils, and attending local council meetings. Many emphasised the importance of social media:

‘ ... social media is very important ... influencing the influencers ... it’s finding those people and getting them on side and getting them to raise awareness on social media as well.’

4.1.4. Challenges across all groups

To help better achieve their environmental goals, both the business and community groups felt specialist support and advice would be a significant aid. In the business group, one participant felt strongly that local government should offer free audits to help them understand the regulations and opportunities available. Meanwhile, community participants spoke about specialist champions or experts who could help advise, coordinate and provide administrative support. This overlapped with the theme of personnel and, for campaign and community groups, centred on difficulties convincing people to regularly give their time:

‘ ... a lot of things do fall down because of no capacity.’

The campaign group felt strongly that greater collaboration between groups was important, a view shared by the business group, who were keen for more climate-related networking opportunities:

‘It’s networking ... we are all doing the same thing over and over again from scratch ... there’s no collaboration, sharing resources ... there’s a lot of fear that everyone’s competing and that if we share information, it will be to our detriment ... networking opportunities ... would help everyone.’

A theme noted by all groups was political change, the campaign group feeling strongly that meaningful steps to tackle the climate emergency were contingent on more proactive government initiatives:

‘ ... so many things that need changing ... unless you have a government that’s willing to make all those changes, pass laws ... we’re never going to try to make the real change that we need to achieve carbon zero ... political power is extremely important.’

Business and community group participants felt that they were making a positive environmental impact, although the business group were more likely to describe it as small and incremental change:

‘ ... just don’t think we have the power to do massive changes, unfortunately.’

For community participants, being part of a group of like-minded individuals was important to combat feelings of powerlessness and the overall feeling was that positive changes were being made. Both groups believed that change was more likely to occur as a result of group collaboration:

‘ ... huge potential to make a difference ... I’ve got to believe that ... I wouldn’t be bothering else.’

4.2. Motivations

Table 2 outlines the number of times that each group commented on the various motivatory factors for further action. While not signifying scale, it provides a context for the commentaries that follow.

This provides a backdrop for the commentaries that follow and is not a quantification of the motivatory factors.

Many factors motivate environmental engagement by these groups, but it is clear that personal drivers are the most prominent force overall (75%), rather than external factors. Though internal and external forces are more balanced in the private sector group compared to the public or voluntary sector groups, concerns for the future and personal ethics are the principal individual issues across all three.

4.2.1. Business group

Here, there was a reasonable balance between external (58%) and personal (42%) drivers of motivation. On regulations,

Table 2
Motivational issues for climate-related actions across the three focus groups.

Motivators	Business		Community		Campaign		Total	
Concerns for future generations			6	29%	6	32%	12	23%
Ethical stance	5	42%	2	10%	2	11%	9	17%
Urgency and scale			1	5%	5	26%	6	12%
Raising awareness			1	5%	4	21%	5	10%
Rising costs			4	19%			4	8%
Social inequality			1	5%	2	11%	3	6%
Personal drivers	5	42%	15	71%	19	100%	39	75%
Funders and regulators	4	33%	5	24%			9	17%
Customers and public	3	25%	1	5%			4	8%
External drivers	7	58%	6	29%	0	0%	13	25%
Motivators	12	100%	21	100%	19	100%	52	100%

participants in construction and housing were well aware of government and global pledges regarding net zero carbon and these aims often corresponded with the ethics of small business:

'... in the construction industry ... how we can reduce or create net zero carbon buildings ... whether that's building new ones ... or rather going down a refurbishment route ... that's one of the main drivers for us ... we want to do it as a business, but the industry's also requiring it from us.'

Personal ethics was cited as the primary personal driver for action and this correlates with Williams and Shaeffer (2013) who found that personal senses of responsibility were essential in motivating small business owners towards climate actions. Personal values were often integrated into business practices:

'On a personal level ...we do it as much as we can at home ... it just makes sense to us to do it as a business.'

'... always linked it to ethics ... business being a force, it's a cliché, but a force for good ... being able to do things in a way that I think is right and have hope in the future and have a sense of agency and self-determination. All of those things are what motivates me.'

'... for me, it's obviously wanting to lead by example ... I guess I'm aware people look around at what everyone else is doing ... important to be aware of that ... and the responsibility that comes with it.'

4.2.2. Community group

In the community group, motivations were broader and personal drivers (71%) outweighed external forces. Concerns for future generations had the lead role, with influences from senior members and inspirations from younger members of the community:

'... younger people being more kind of tuned in to all of this because I think our younger members, sort of in their twenties and thirties, were really kind of cheerleading for the environment strategy and were really wanting to get it off the ground so that was definitely a motivation in terms of us.'

The other main themes covered having environmental policies as a funding condition, and rising costs. The cost issue also impacted on the types of engagement, with one community group running a repair café to encourage a sustainable and economical lifestyle. There was also a sense of social inequalities having a bearing on the climate emergency:

'... so many issues that run parallel to it ... being responsible about the way you use stuff ... more of a sense of equality that we can't just take, take, take and not, you know, not have to take responsibility for that in terms of what the implication are, how that impacts on other people.'

Table 3

Barriers to climate-related actions across the three focus groups.

Barriers	Business		Community		Campaign		Total	
Accessing opportunities	18	33%			10	13%	28	15%
Frustration and avoidance	4	7%	8	15%	8	10%	20	11%
Bureacracy and time	22	40%	8	15%	18	23%	48	25%
Political atmosphere	2	4%	3	5%	14	18%	19	10%
Corporate power			5	9%	8	10%	13	7%
Cultural norms	1	2%			8	10%	9	5%
Issue genderisation	4	7%	1	2%	1	1%	6	3%
Politics, power and culture	7	13%	9	16%	31	39%	47	25%
Mixed messaging	9	16%	7	13%	7	9%	23	12%
Media coverage	1	2%	1	2%	8	10%	10	5%
Information	10	18%	8	15%	15	19%	33	17%
Accessibility of support	39	71%	25	45%	64	81%	128	68%
Finances	7	13%	8	15%	4	5%	19	10%
Available time			6	11%	6	8%	12	6%
Availability of personnel			6	11%			6	3%
Specialist knowledge needs					4	5%	4	2%
Resources	7	13%	20	36%	14	18%	41	22%
Suitable alternatives and technology	6	11%	5	9%	1	1%	12	6%
Existing infrastructure	3	5%	5	9%			8	4%
Infrastructure and technology	9	16%	10	18%	1	1%	20	11%
Capacity and capabilities	16	29%	30	55%	15	19%	61	32%
Barriers	55	100%	55	100%	79	100%	189	100%

Participants were cognisant of the urgency of climate issues:

'It's a scary, scary thing ... just terrifying.'

4.2.3. Campaign group

Personal drivers were the sole motivators in this group, with protecting the future of the planet, urgency, and awareness raising covering 79% of motivations. Several respondents mentioned the importance of preserving the environment for their children or grandchildren:

'... key one was my grandchildren ...'

'... grandchildren living very close by ... those local actions ... could make a difference for that future generation.'

'the fear ... what my children will face and the guilt ... worst-case scenario is them living in a potentially war zone situation.'

There was a particularly powerful sense of the urgency and scale of the current situation in this group. Participants also discussed how greater awareness and education had prompted them to take action, with some mentioning popular films and news outlets:

'... watching Don't Look Up a few weeks back on Netflix ... then seeing an interview on GB News about the heat coming on Monday ... that's why I get involved in any local campaign.'

Others mentioned being influenced by experts or social media and noted the importance of social media in environmental campaigns and activism. Participants felt a strong ethical obligation to engage with environmental issues, as well as frustration at government inaction, dominant political systems, and corporate greed. There was also a firm sense of environmental action being part of the fight for social equality. Political change was viewed as key to tackling the environment and to improving living standards for the most vulnerable.

4.3. Barriers

Table 3 signals the repetitions made about the various types of barriers encountered and, though not directly measuring the strength of those feelings and experiences, it provides a comparative picture of similarities and differences across the groups.

This provides a backdrop for the commentaries that follow and is not a direct quantification of the barriers noted.

Though variations exist across the groups, the most common barriers concerned the accessibility of support, this then reflecting itself in feelings of being incapable of taking effective action on climate emergency issues.

4.3.1. Business group

For businesses, accessing support was cited as the greatest barrier (71%) to engagement, with bureaucracy and time being the principal challenge. There were frequent complaints about complicated and contradictory information, the time and skills needed to complete applications, issues with partial funding, and difficulties qualifying for support. All spoke of frustrating experiences:

'... filled out a form ... they said all right, let's have a meeting ... what you're asking for, we don't give ... why are we having a meeting then? ... just a bit odd.'

'one of the shocking things really is just how focused it [government support] is on the big industries, huge organisations, councils and trade associations.'

'Government tends to think in hundreds of millions ... when you start to say things like ... a project ... £90,000 of funding, they just think that's pathetic ... there's a mindset that needs to change, but I do know that it is changing.'

Even when SMEs were eligible for support, those who engaged found that applications often generated significant administration that exceeded the capacity of small teams:

'... it's like a minefield, trying to find the actual tools to help you get all the reporting and everything done. That's really difficult for small SMEs.'

'... there's a lot of, they make it sound easy, but there's a lot of barriers and forms and stuff that you have to jump or get through before you actually get to speak to someone, which I think is really difficult.'

Other challenges unique to small businesses included their scale, as reflected in an independent entertainment venue being unable to source sustainable refreshments at an affordable price because of the need to bulk-buy, requiring excessive storage capacity.

Another strong theme was that of information; namely, the difficulty accessing clear, relevant, unbiased and targeted information regarding sustainable practices and support:

'... everyone's just expected to know this information ... there are about 150 websites ... and they're not consistent ... hard to know which ones are legitimate ... (or) driving a particular message because it suits their organisation ... very hard to find the actual accurate information that is unbiased ...'

'... lack of tangible information and the fact that SMEs have not got time to go and sort it out ... really confusing to have to find out what would be the best measure.'

Additional strong themes which emerged were cost, lack of effective and easily-available technology such as cost-effective solar panels, feelings of burn out, and issues around gender and the feminisation of environmental discourse:

'flaky and fluffy ... all a bit emotional ... not seen as proper business.'

4.3.2. Community group

For community groups, a lack of resources (finances, time, and personnel) was the main barrier, with notable challenges around accessing clear information, this then leading to frustration and issue avoidance. On costs, participants discussed the difficulties with funding sustainable improvements for community buildings, the prohibitive cost of environmentally-friendly alternatives to everyday materials such as bubble wrap and cleaning products, and government cuts on County Councils resulting in reduced bus services in some areas. Environmentally friendly products are for many people a luxury:

'If you're in the nice position of being able to afford it then you do. But if you're not, then you can't and you feel so angry ...'

Community participants felt strongly that information was not clear, and eco-schemes were not well promoted by many bodies nationally or locally:

'... lot of environmental projects going on ... not an awful lot of publicity about them ... people, if they knew what was going on, they would be a lot more interested ... whether it's through Facebook, the local paper ... encourage people to come and see and then maybe they might get involved ...'

'... don't really see anybody like government scientists or ... Greenpeace or someone from one of the big international campaigning groups ... not making the case strongly enough now.'

Interestingly, the community group were the only group to mention the impact of the Covid-19 pandemic, which they felt was a significant barrier to engagement because of the disruptive impact of a two-year hiatus in operations and activities and difficulties convincing people to return. For one participant, who organises a senior social club, the pandemic had caused something of a re-evaluation of life priorities:

'... our generation ... they've maybe lost their fight ... lost two years of their life ... if another Covid comes along, you know, we don't want to look back and say, I wish we'd done that ... things like the environment ... now take second or third or even fourth place ... We haven't lived for two years.'

Finally, there was considerable frustration with the failure of large corporations and nation states globally to properly engage with net zero targets and related activities. Issues ranged from the packaging used by Amazon, to unclear governmental environmental policy, to decisions to relocate popular supermarkets out of town. These issues merged into a political theme and senses of powerlessness when faced with emissions from countries such as China and the United States.

4.3.3. Campaign group

For the campaign group, the mostly commonly discussed barriers to engagement were related to politics, power, and culture. There was anger and frustration with successive Conservative governments, associated environmental policy, capitalism and consumerism, describing them as primary drivers of the climate emergency:

'... none of these Conservative blasted mini-Borises are even mentioning the Chatham House warnings on the climate crisis ... ignoring it ... letting 67 million UK people and the rest of the world down.'

'... raised to be consumers not citizens ...'

Across the board, there was a sense that current political structures, including the UK voting system, was antithetical to meaningful change. Indeed, the political system and culture was seen as a major cause of voter apathy, disengagement and low turnout. Overlapping this was a strong sense that social inequality was directly related to climate change and to a culture of greed and class division in the UK:

'What does that say for our society if we don't make those changes now and we don't have that political will and a system that stops any Green voice getting anywhere near power because we're first past the post and not proportional representation?'

'... MPs that are worth hundreds of millions of pounds making our decisions for people that are on hardly any money at all, and they're being told to not have Netflix.'

The current government, structures of capitalism and consumer culture were all seen as interconnected with many of the additional barriers mentioned, including self-interest, the distribution of power, and unhelpful media representations. Unsurprisingly, burn out and frustration emerged as a fairly strong theme, overlapping with a lack of resources such as time and personnel:

'... you start a group with six or ten people ... end up with two or three really doing it ... then it boils down to two ... one day you say, I just can't do this anymore ... It's taken over my whole life ...'

Finally, some participants felt that lacks of communication and networking opportunities between campaign groups were significant issues, resulting in a tendency to reinvent-the-wheel:

'I'm interested to find other communities who have successfully taken on bus companies to address local pollution ... What were the keys to their success? ... it's really difficult to actually find them.'

5. Discussion

The findings confirm the importance of effectively tailoring the climate emergency action message for the various micro/meso and macro-levels across society (Molthan-Hill et al., 2020; Serpa & Ferreira, 2019). This is particularly so for private sector businesses where effective responsible management education can provide the foundation for progress, as noted by Parkes (2017) and Beddewela et al. (2017). There now exist clear personal drives to take action on climate emergency issues, particularly in the voluntary and public sectors, but also in private sector businesses where funders, regulators, customers and the public are also driving for change. The findings here further reinforce the Howarth et al. (2020) notion of climate change being treated as a 'slow emergency', as it appears that lowering the barriers to action could now be a considerably more effective approach to catalysing climate emergency actions than raising motivations even further would be. Such findings could be reflected in responsible management education practices, particularly in strategic studies, in crisis leadership (Hertelendy et al., 2021), and in finding solutions that span the stakeholder spectrum.

In a survey concerning climate change actions by a thousand top managers, Zhang and Welch (2023) identify three types of manager, namely 'forerunner, complacent and market-oriented', with only the forerunner being adaptive to climate change issue. In a similar vein, Rasmussen et al. (2019) highlight the importance at community levels for capacity building and advocacy training to help facilitate climate change adaptation. Both of these chime with the need identified in this research for barriers to access to be lowered, so that such forerunners and local groups can be equipped to emerge and take meaningful climate emergency actions, particularly when signs appear that attention has drifted even more towards the larger organisations (Devine-Wright, 2019). In business entrepreneurship studies too, the practically untapped potential at meso-levels is further reinforced by Kim et al. (2016).

It is interesting to note the apparent feminisation of the climate emergency issue and the predominance of barriers over motivators. These are apparent when, on a practically equal 80/20 basis, the focus groups were predominantly female (82%) compared to male, and the barriers noted (78%) far exceeded motivations. The latter though is not surprising as it is a facet of human biology, with Ledgerwood and Boydston (2014) and Kiensinger (2009) noting that the neural processes in the human brain are more attuned towards recalling negative rather than positive experiences. The self-selecting nature of the groups resulted in the gender-skewed sample of female participants and this correlates with work by Rickards et al. (2014) who found that environmental engagement has become coded as feminine in popular discourse. In contrast, profit-seeking, individualism and materialism are coded as masculine behaviours and may be considered incommensurate with 'costly environmental engagement'. The gender disparity of the groups was acknowledged by participants in both the business and community groups who were aware of these gendered stereotypes and voiced related frustrations. Management education practices could more prominently address matters such as the impact of issue genderisation in

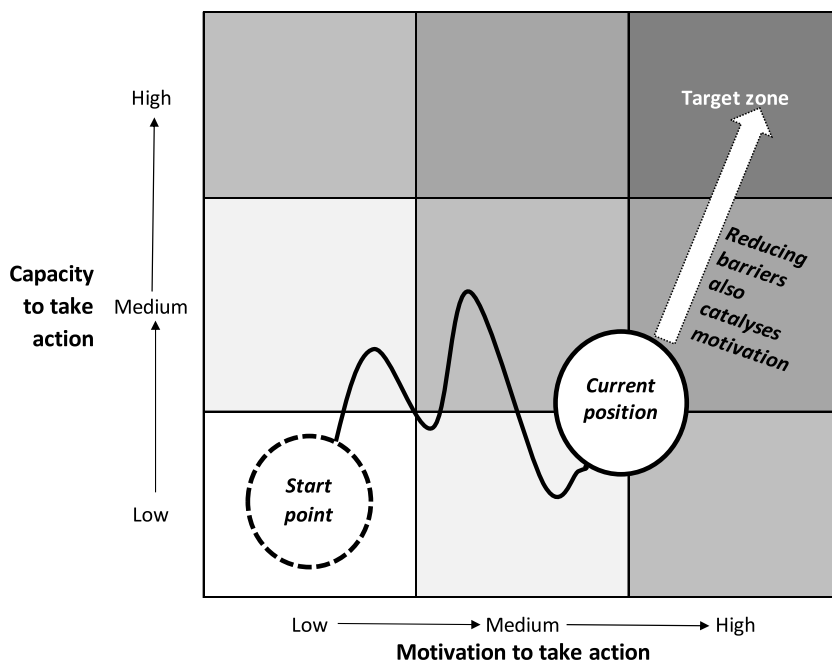


Fig. 1. Schematic representation of the capacity and motivation to take climate emergency actions across micro/meso societal groups such as SMEs.

responsible management, and the importance of lowering barriers in motivational leadership.

The potential impact of such measures on climate emergency actions is illustrated in Fig. 1 where, from a starting point some years ago when there was little acceptance of there being a major climate issue, to one now where there is a clear desire and motivation to do something but the capacity to do so is limited. That journey has not been direct and progress has been sporadic and journeyed back and forth.

Based on the research undertaken in this study, this illustrates the journey so far on climate emergency actions, and the opportunities that exist, for SMEs and other micro/meso-level societal groups.

The potential is that through effective management education and the development of resources that target the various micro/meso-level groups such as SMEs across society, the capacities and motivations to take actions can be enhanced, in large part by reducing the barriers that currently exist to taking climate emergency actions.

5.1. Practitioner recommendations

Based on this research, the following recommendations are made for management education practitioners, consultants and others when addressing complex issues such as the global climate emergency:

- Tailor services and advice to reflect the more limited capabilities within, and resources available to, the many smaller societal micro-meso-level groups that exist compared to large organisations. Such more tailored advice could apply to multiple aspects of that organisation or groups' activities, such as its strategy, marketing, operations, finance, human resource management, organisational development and beyond.
- Policy makers, strategists, regulatory bodies, and producers guidelines, need to consider the best approaches for the many societal groups that exist between individuals themselves and major organisations, corporations, and similar entities. Such micro/meso-level are influential upon the individuals who are connected with them and their associates, as well as towards the larger entities who appreciate good practice and are willing to learn from it.
- Higher education has a particular role to play in alerting its students, alumni, partners and others about the need to consider the place and importance of the many micro/meso-level groups in their disciplinary field when it comes to addressing complex interdisciplinary global challenges such as the ongoing climate emergency.

5.2. Further research

While this research provides a case-study style snapshot of some parts of the overall micro/meso-level groups in society, there are many other potential studies that could be undertaken. The focus here is on just one of the many global issues that exist, it is on a part of one country, and focuses on only three different types of groups; in the business world, in the community, and among campaigners. Clearly, there is scope to broaden this out geographically, to include other groups or even to focus on specialist parts of those already explored. A more comprehensive and quantitative study, perhaps using an appropriate questionnaire or survey, would help further develop and substantiate these initial findings. A rich portfolio of potential avenues for wider and deeper research have emerged from this study, the findings of which could help deepen our knowledge of how best to tackle, not only the ongoing climate emergency, but also many of the other global issues that exist, as reflected in the 17 Sustainable Development Goals (United Nations, 2022).

6. Conclusions

This study highlights areas of both divergence and convergence between societal groups in terms of climate actions and engagement, and in terms of motivations and barriers. SMEs face unique climate emergency challenges which are not necessarily experienced by larger corporations. Similarly, community and campaign groups, though sharing many of the same goals and ethics, also face unique challenges and cite unique motivations for engagement. When accessing funding and opportunities, both campaign and business groups experienced many of the same barriers and challenges. Clearly, all three groups are dynamic and complex, having some shared operational structures, goals and experiences, but each with specific experiences of engaging with the climate emergency.

These self-selected participants were often engaged in some form of environmental action, and it is clear that personal ethics plays a significant role in terms of motivating engagement. Even in the business group, external drivers and personal drivers were closely balanced in the drive for environmental action. It seems that, while government regulations play an important role in motivating smaller businesses to engage with environmental issues, there are already strong ethical foundations in place.

Meanwhile, barriers to action were diverse and significant, with participants exhibiting notable frustration that well-intentioned plans were often thwarted by time-consuming bureaucracy. All groups referenced the difficulties in accessing clear, concise and unbiased information. In campaign and community groups especially, there are perceptions that large corporations often operate unethically and that politicians are ineffective. Many participants felt that real progress requires a significant change in national politics, with capitalism being the architect of the climate emergency. Accessing environmentally targeted support was considered bureaucratic or poorly communicated, and thus proved a significant barrier to business and campaign groups. Given that personal ethics is a strong driver for the participants, it may be that lacks of engagement are often driven by the difficulties experienced in accessing relevant practical support.

Finally, all groups were clear that, aside from political change, the development most likely to aid their engagement with climate emergency issues centred on practical support that will reduce the existing barriers and help establish an adequate base of resources.

This often means people, in terms of specialist advisors or simply 'feet on the ground', as well as time and money.

Author statement

This is to confirm that the above is the work of the Authors stated.

Data availability

Data will be made available on request.

Acknowledgements

Funding from Research England through research grants to Canterbury Christ Church University.

Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.ijme.2023.100831>.

Appendix 1. Focus group questions and discussion topics

- What is your understanding of the climate emergency (CE) and how well-informed would you say you are in terms of the CE?
- How easy is it to obtain clear, reliable information about climate change?
- How easy is to obtain clear information as to what you can do as a small business/campaign/community group to engage with the climate emergency?
- In what ways, if any, does your business/community/campaign group engage with the climate emergency/environmental issue?
- What motivated you to do this?
- What prevents you from implementing further strategies?
- How easy would you say it is to implement environmentally friendly policies in your business/community/campaign group?
- Is it more or less difficult for smaller businesses to implement environmental policies than for big business, and why?
- Do you think political affiliation affects attitudes towards climate change?
- Are there any issues to bear in mind in terms of participant selection and analysis?
- How clear and easy is it to understand information on the climate emergency in the media?
- How urgent do you think climate change is?
- Do you feel that your business/group/community can make a difference to the climate emergency?
- Do you feel that you have the appropriate systems in place to adapt to and engage with environmental issues?
- In what ways do you think climate change and the climate emergency directly impacts your business?
- What does your business do already in terms of engaging with environmental issues and what more could you be doing?
- Do you feel there is sufficient support and guidance from the government in terms of making environmental changes to your business?
- Do you see any cost benefits to implementing environmentally friendly policies?
- How important is the environment in your short and long term plans?

References

- Allen, M. W., & Craig, C. A. (2016). Rethinking corporate social responsibility in the age of climate change: A communication perspective. *International Journal of Corporate Social Responsibility*, 1(1), 1–11.
- Alvarez Jaramillo, J., Zарtha Sossa, J. W., & Orozco Mendoza, G. L. (2019). Barriers to sustainability for small and medium enterprises in the framework of sustainable development - literature review. *Business Strategy and the Environment*, 28(4), 512–524.
- Andries, A. M., Marcu, N., Oprea, F., & Tofan, M. (2018). Financial infrastructure and access to finance for European SMEs. *Sustainability*, 10(10), 3400.
- Astor, A. (2016). Social position and place protective action in a new immigration context: Understanding anti-mosque campaigns in catalonia. *International Migration Review*, 50(1), 95–132.
- Attari, S. Z., Schoen, M., Davidson, C. I., DeKay, M. L., de Bruin, W. B., Dawes, R., & Small, M. J. (2009). Preferences for change: Do individuals prefer voluntary actions, soft regulations, or hard regulations to decrease fossil fuel consumption? *Ecological Economics*, 68(6), 1701–1710.
- Babbie, E. (2013). *The practice of social research: International edition*. California: Wadsworth Cengage Learning.
- Beddewela, E., Warin, C., Hesselden, F., & Coslet, A. (2017). Embedding responsible management education - staff, student and institutional perspectives. *International Journal of Management in Education*, 15(2), 263–279.
- Bennett, R. J., & Ramsden, M. (2007). The contribution of business associations to SMEs: Strategy, bundling or reassurance? *International Small Business Journal*, 25(1), 49–76.
- Burningham, K., Barnett, J., & Thrush, D. (2006). *The limitations of the NIMBY concept for understanding public engagement with renewable energy technolgy: A literature review*. School of Environment and Development, University of Manchester.
- Busch, T., Johnson, M., & Pioch, T. (2020). Corporate carbon performance data: Quo vadis? *Industrial Ecology*, 26(1), 350–363.

- Cassells, S., & Lewis, K. (2011). SMEs and environmental responsibility: Do actions reflect attitudes? *Corporate Social Responsibility and Environmental Management*, 18(3), 186–199.
- Corry, O., & Reiner, D. (2021). Protests and policies: How radical social movement activists engage with climate policy dilemmas. *Sociology*, 55(1), 197–217.
- Delina, S., & Diesendorf, M. (2016). Strengthening the climate action movement. Strategies from contemporary social action campaigns. *For and About Social Movements*, 8(1), 117–141.
- Devine-Wright, P. (2009). Rethinking NIMBYism: The role of place attachment and place identity in explaining place-protective action. *Community and Applied Psychology*, 19(6), 426–441.
- Devine-Wright, P. (2019). Community versus local energy in a context of climate emergency. *Nature Energy*, 4, 894–896.
- Doh, S., & Kim, B. (2014). Government support for SME innovations in the regional industries: The case of government financial support program in South Korea. *Research Policy*, 43(9), 1557–1569.
- Dvoulety, O., Srhoj, S., & Pantea, S. (2021). Public SME grants and firm performance in European union: A systematic review of empirical evidence. *Small Business Economics*, 57(1), 243–263.
- Flyvbjerg, B. (2006). Five misunderstandings about case-study research. *Qualitative Inquiry*, 12(2), 219–245.
- Galaz, V., Tallberg, J., Boin, A., Ituarte-lima, C., Hey, E., Olsson, P., & Westley, F. (2017). Global governance dimensions of globally networked risks: The state of the art in social science research. *Risk, Hazards & Crisis in Public Policy*, 8(1), 4–27.
- Gayle, D. (2022). *Climate activists plan direct action against UK Oil infrastructure*. The Guardian, 14 February.
- Ghissetti, C., Mancinelli, S., Mazzanti, M., & Zoli, M. (2017). Financial barriers and environmental innovations: Evidence from EU manufacturing firms. *Climate Policy*, 17(1), 131–147.
- Gutierrez, A. (2022). **The climate crisis - a race we can win, united nations**. Available at: <https://www.un.org/en/un75/climate-crisis-race-we-can-win>.
- Hampton, S., Blundel, R., Wahga, A., Fawcett, T., & Shaw, C. (2022). Transforming small and medium-sized enterprises to address the climate emergency: The case for values-based engagement. *Corporate Social Responsibility and Environmental Management*, 29(5), 1424–1439.
- Harmon-Jones, E. (2019). On motivational influences, moving beyond valence, and integrating dimensional and discrete views of emotion. *Cognition & Emotion*, 33(1), 101–108.
- Harries, T., McEwen, L., & Wragg, A. (2018). Why it takes an 'ontological shock' to prompt increases in small firm resilience: Sensemaking, emotions and flood risk. *International Small Business*, 36(6), 712–733.
- Hertelendy, A., McNulty, E., Mitchell, C., Gutberg, J., Lassar, W., Durneva, P., & Rapp, D. (2021). Crisis leadership: The new imperative for MBA curricula. *International Journal of Management in Education*, 19(3), 1–8.
- Howarth, C., Bryant, P., Corner, A., Fankhauser, S., Gouldson, A., Whitmarsh, L., & Willis, R. (2020). Building a social mandate for climate action: Lessons from COVID-19. *Environmental and Resource Economics*, 76(4), 1107–1115.
- Jamison, A. (2010). Climate change knowledge and social movement theory. *Climate Change*, 1(6), 811–823.
- Kaesehege, K., Leyshon, M., & Caseldine, C. (2014). Communicating climate change - learning from business: Challenging values, changing economic thinking, innovating the low carbon economy. *Fennia International Journal of Geography*, 192(2), 81–99.
- Kiensinger, A. (2009). Remembering the details: Effects of emotion. *Emotion Review*, 1(2), 99–113.
- Kim, P., Wennberg, K., & Croidieu, G. (2016). Hidden in plain sight: Untapped riches of meso-level applications in multi-level entrepreneurship mechanisms. *Academy of Management Perspectives*, 30(3), 273–291.
- Krueger, R., & Casey, M. (2000). *Focus groups: A practical guide for applied researchers*. Thousand Oaks, CA: Sage Publications.
- Lang, P. J., & Bradley, M. M. (2010). Emotion and the motivational brain. *Biological Psychology*, 84(3), 437–450.
- Ledgerwood, A., & Boydston, (2014). Sticky prospects: Loss frames are cognitively stickier than gain frames. *Experimental Psychology*, 143(1), 376–385.
- Manzoor, F., Wei, L., & Sahito, N. (2021). The role of SMEs in rural development: Access of SMEs to finance as a mediator. *PLoS One*, 16(3), Article e0247598.
- Mayer, A., & Smith, E. K. (2019). Unstoppable climate change? The influence of fatalistic beliefs about climate change on behavioural change and willingness to pay cross-nationally. *Climate Policy*, 19(4), 511–523.
- McHugh, L., Lemos, M. C., & Morrison, H. T. (2021). Risk? Crisis? Emergency? Implications of the new climate emergency framing for governance and policy. *Wires Climate Change*, 12(6), 1–15.
- Miner, J. B. (2005). *Essential theories of motivation and leadership*. New York: Routledge.
- Molthan-Hill, P., Robinson, Z., Hope, A., Dharmasasmita, & McManus, E. (2020). Reducing carbon emissions in business through Responsible Management Education: Influence at the micro-, meso- and macro-levels. *International Journal of Management in Education*, 18(1), 1–15.
- Nohrstedt, D., Mazzoleni, M., Parker, C. F., & Baldassarre, G. D. (2021). Exposure to natural hazard events unassociated with policy change for improved disaster risk reduction. *Nature Communications*, 12, 193.
- North, P., & Nurse, A. (2014). 'War Stories': Morality, curiosity, enthusiasm and commitment as facilitators of SME owners' engagement in low carbon transitions. *Geoforum*, 52, 32–41.
- Oemisch, M., Johnston, K., & Paré, M. (2016). Methylphenidate does not enhance visual working memory but benefits motivation in macaque monkeys. *Neuropharmacology*, 109, 223–235.
- Office for National Statistics. (2022). **Census 2021**. Available at: <https://www.ons.gov.uk/census>.
- Parkes, C. (2017). The principles for responsible management education (PRME): The first decade – what has been achieved? The next decade – responsible management education's challenge for the sustainable development goals (SDGs). *International Journal of Management in Education*, 15(2), 61–65.
- Park, S., Lee, I. H., & Kim, J. E. (2020). Government support and small-and medium-sized enterprise (SME) performance: The moderating effects of diagnostic and support services. *Asian Business & Management*, 19(2), 213–238.
- Perkins, D. D., & Mihaylov, N. L. (2015). Local environmental grassroot activism: Contributions from environmental psychology, sociology and politics. *Behavioural Science*, 5(1), 121–153.
- Petts, J. (2017). Small and medium-sized enterprises and environmental compliance: Attitudes among management and non-management. In R. Hillary (Ed.), *Small and medium-sized enterprises and the environment* (pp. 49–60). London: Routledge.
- Pickernell, D., Senyard, J., Jones, P., Packham, G., & Ramsey, E. (2013). New and young firms: Entrepreneurship policy and the role of government - evidence from the federation of small businesses survey. *Small Business and Enterprise Development*, 20(2), 358–382.
- Powe, N. A., & Trevor, H. (2011). Housing development and small-town residential desirability: Valued aspects, resident attitudes and growth management. *Town Planning Review*, 82(3), 317–340.
- Rasmussen, J., Friis-Hansen, E., & Funder, M. (2019). Collaboration between meso-level institutions and communities to facilitate climate change adaptation in Ghana. *Climate & Development*, 11(4), 355–364.
- Rubens, A., Schoenfeld, G., Schaffer, B., & Leah, J. (2018). Self-awareness and leadership: Developing an individual strategic professional development plan in an MBA leadership course. *International Journal of Management in Education*, 16(1), 1–13.
- Rygula, R., Golebiowska, J., Kregiel, J., Kubik, J., & Popik, P. (2015). Effects of optimism on motivation in rats. *Frontiers in Behavioral Neuroscience*, 9, Article 32.
- Scales, P. C., Van Boekel, M., Pekel, K., Syvertsen, A. K., & Roehlkepartain, E. C. (2020). Effects of developmental relationships with teachers on middle-school students' motivation and performance. *Psychology in the Schools*, 57(4), 646–677.
- Schlosberg, D. (2004). Reconceiving environmental justice: Global movement and political theories. *Environmental Politics*, 13(1), 517–540.
- Schwenkenbecher, A. (2017). What is wrong with NIMBY's? Renewable energy, landscape impacts and incommensurable values. *Environmental Values*, 26(6), 711–731.
- Serpa, S., & Ferreira, C. (2019). Micro, meso and macro levels of social analysis. *International Journal of Social Science Studies*, 7(3), 120–124.
- SIS International Research. (2023). **Methodologies such as Focus Groups allow for rich discussion and probing, which is unmatched in quantitative research**. Available at: <https://www.sisinternational.com/advantages-of-focus-groups/>.

- Statista. (2022). Number of people employed in private sector businesses in the United Kingdom in 2022, by employment size. Available at: <https://www.statista.com/statistics/676671/employees-by-business-size-uk/>.
- Stavrinoudis, T., & Kakarougkas, C. (2018). A scientific modeling of factors of human motivation in organizations. In V. Katsoni, & K. Velander (Eds.), *Innovative approaches to tourism and leisure* (pp. 447–464). Springer Proceedings in Business and Economics.
- Stern, P. C. (2012). Fear and hope in climate messages. *Nature Climate Change*, 2(8), 572–573.
- Tilly, C. (2008). *Contentious performances*. New York: Cambridge University Press.
- UK Government. (2021). Net zero strategy: Build back greener. Available at: <https://www.gov.uk/government/publications/net-zero-strategy>.
- United Nations. (2022). Sustainable development goals. Available at: <https://sdgs.un.org/goals>.
- Wainwright, M. (2006). *In the shadow of Drax. Not so much a fight as a festival. 1 September*. The Guardian.
- Wakabayashi, M., & Arimura, T. H. (2016). Voluntary agreements to encourage proactive firm action against climate change: An empirical study of industry associations' voluntary action plans in Japan. *Cleaner Production*, 112, 2885–2895.
- Williams, S., & Schaefer, A. (2013). Small and medium-sized enterprises and sustainability: Managers' values and engagement with environmental and climate change issues. *Business Strategy and the Environment*, 22(3), 173–186.
- World Bank. (2023). Small and medium enterprises (SMEs) finance. Available at: <https://www.worldbank.org/en/topic/sme/finance>.
- Wright, C., & Nyberg, D. (2017). An inconvenient truth: How organizations translate climate change into business as usual. *Academy of Management*, 60(5), 1633–1661.
- Yin, R. K. (2003). *Case study research: Design and methods*. California: Sage Publication.
- Zhang, F., & Welch, E. (2023). Explaining public organization adaptation to climate change: Configurations of macro- and meso-level institutional logics. *Journal of Public Administration Research and Theory*, 33(5), 357–374.