

Royal Roads University

**Community Engagement Strategies for Climate Change coming out of the
Pandemic**

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SPCC616: Climate Solutions

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Introduction

Introduction to Climate Change

Our changing climate system is of the most pressing challenges of the century. According to the most recent IPCC AR6 report, authored by 234 international scientists, the climate is rapidly changing, and this is predominantly due to anthropogenic influence. The observed changes are unequivocal at the global scale and are becoming more apparent at the regional and local spatial scales (IPCC, 2021). It is predicted that natural disasters will get progressively more frequent once the threshold of 1.5°C is surpassed, subjecting nearly 1 billion people to regular life-threatening heat waves and hundreds of millions to droughts. Entire ecological systems will be under dire threat from these changing conditions. We are already seeing an increase in flooding incidences, wildfires, and heat waves across the globe, most notably during the pandemic. The IPCC report found that there is no scientific doubt that human activities are behind the climate change driving these extreme events (Jenkins, 2021). Whether this certainty—and the alarm it rouses—will result in any concrete change remains to be seen.

A collective sense of urgency is critical to taking climate action, and we need to understand the public's perception of climate change as that is critical for the implementation of an appropriate and effective action plan (Shi et al., 2015). Public concern is the precondition for informing people effectively about climate change risks, but it also has the potential to increase peoples' willingness to change their behaviors and to accept policy measures aimed at climate change mitigation (Shi et al., 2015).

There are many factors that influence peoples' values, including education, political orientation, national prosperity, and more. Our values shape our opinions which then dictate how we respond to a threat, whether climate change or COVID-19 ("COVID") (Webster et al., 2020). For that reason, effective and targeted communication is essential when acting against any crisis.

Having dealt with a rapidly emerging global pandemic the last few years, we have watched the world respond to a global crisis in a way many deemed was impossible. Soon after the

spread, the cause was quickly identified, and measures were taken within each country to stop the spread of the virus. This included lockdowns, social distancing, mask requirements, and the introduction of COVID testing sites. A vaccine was quickly developed, and the virus was tracked and communicated as viral mutations arose from the original variant. Though there are similarities as well as differences between COVID and climate change, the ways in which governments, from local to national, responded to this pandemic can be analyzed to help us determine the best ways to engage the public on climate change action. If we can join together to fight a global pandemic, then there is hope that we can do so to mitigate anthropogenic climate change.

Introduction to the Coronavirus

The COVID pandemic is one of the deadliest diseases to have emerged in recent history (Morens et al., 2020). Though scientists warned of such viruses emerging, few preventative actions were taken resulting in the spread of the disease after its detection in late 2019. Lives were quickly changed, and the world had to undertake robust scientific, societal, and public health actions to preserve the economy while limiting the spread of this disease (Morens et al., 2020). Countries differed in their handling of the pandemic, with variations in political, financial, and healthcare responses. Many countries underwent draconian nationwide lockdowns, although some were stricter than others (Bremmer, 2021). Despite battling the second wave of the pandemic, Canada was moving forward with reopening the country before vaccines reached 4% of the population, thus highlighting the tension between political and economic pressures and public health (Bremmer, 2021).

What really determined the management of the virus was the way the public reacted to these sudden societal changes. The pandemic highlighted people's ability to work together, thus building a 'collective efficacy' and awareness that individual change is a critical aspect of systemic change (Webster et al., 2020). COVID has provided growing evidence that governments can make swift and robust changes and that the public's behaviors can change suddenly. We also learned that these changes come at a cost, that we require top-down governance to ensure these changes remain in the long run, and that science and community engagement play a crucial role in informing this entire process (McKinley et al.,

2021). As we continue to navigate through the most recent stages of the pandemic, it is time to question whether we should continue to support the 'business as usual,' way of life, or if we should urge for climate action and push for a more sustainable future.

The Coronavirus and Climate Change

The pandemic has seemingly outshone the urgency of climate change, though the two crises share many similarities due to their global impacts. However, given the many commonalities in these two crises, an examination of government responses to the pandemic may allow for the development of more effective methods of engaging the public on climate action (Geiger et al., 2021).

COVID and climate change are similar in that they represent physical shocks that then lead to an array of socioeconomic impacts (Pinner et al., 2020) (Figure 1). COVID and the climate crisis are both systemic in that their direct manifestations propagate throughout the world, and both are nonlinear as their socioeconomic impacts grow disproportionately once certain thresholds are met (Pinner et al., 2020). These two crises are both health challenges presenting a global threat, each with its own 'risk signature'. Both crises disproportionately affect the more vulnerable populations, and both bring forth the crucial questions of equity, economics, and the role of public institutions and the different responses of individuals and cultures (Webster et al., 2020). Like climate change, many communities and demographics are disproportionately affected by COVID-19. Many factors, such as poverty, healthcare access, and geography, are intertwined and have a significant influence on people's quality of life.

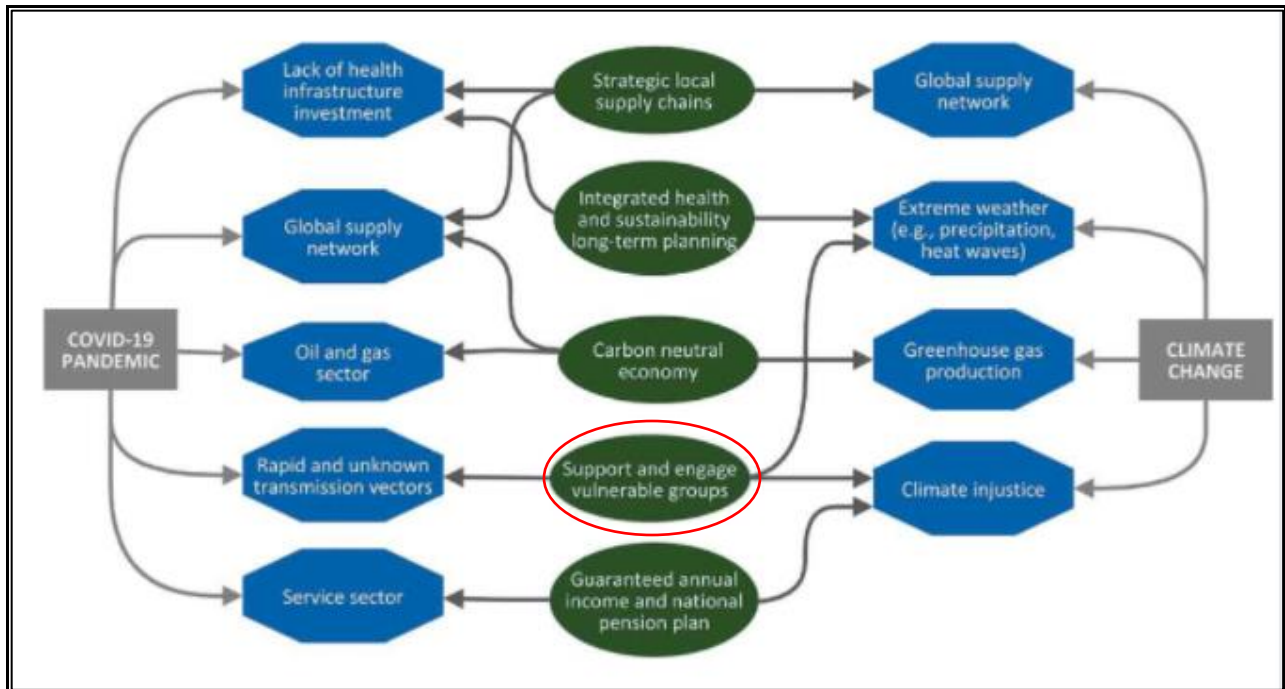


Figure 1. The links between the coronavirus and climate change—engaging different groups is a critical factor of both crises (Newell & Dale, 2020).

Moreover, the pandemic holds profound lessons that could help us address climate change in the future. COVID is a sped-up analogy of climate change that demonstrates the importance of good communication and community engagement (Webster et al., 2020). But while the impacts of climate change have seemingly been felt over a longer time scale, COVID arose in a shorter time frame with drastic impacts. The very different timescales highlight the challenges people have responding to a rapidly emerging threat versus a slow one. The same social insights used to guide communications with COVID can be used to support climate action. As seen with the pandemic, behaviors change when social norms shift, and how people react is based on their concerns and values and their capacity to make change (Webster et al., 2020). Our response to the pandemic has provided insight to what profound and quick change in a society can look like (Webster et al., 2020). Social distancing showed that individual actions can make a difference across the whole of society, it is often not made clear in climate change communications that individual change is part of systemic change (Corner, 2020). A crisis like COVID-19 brings out peoples' altruistic or individualistic behavior, which highlights the importance of community-oriented values which are also essential for climate action. Global surveys have shown that

now may be the best time to take climate action, even while we look to resolve the pandemic. One reason may be that a majority of the world's population now take the climate crisis as seriously as the COVID one (Figure 2).

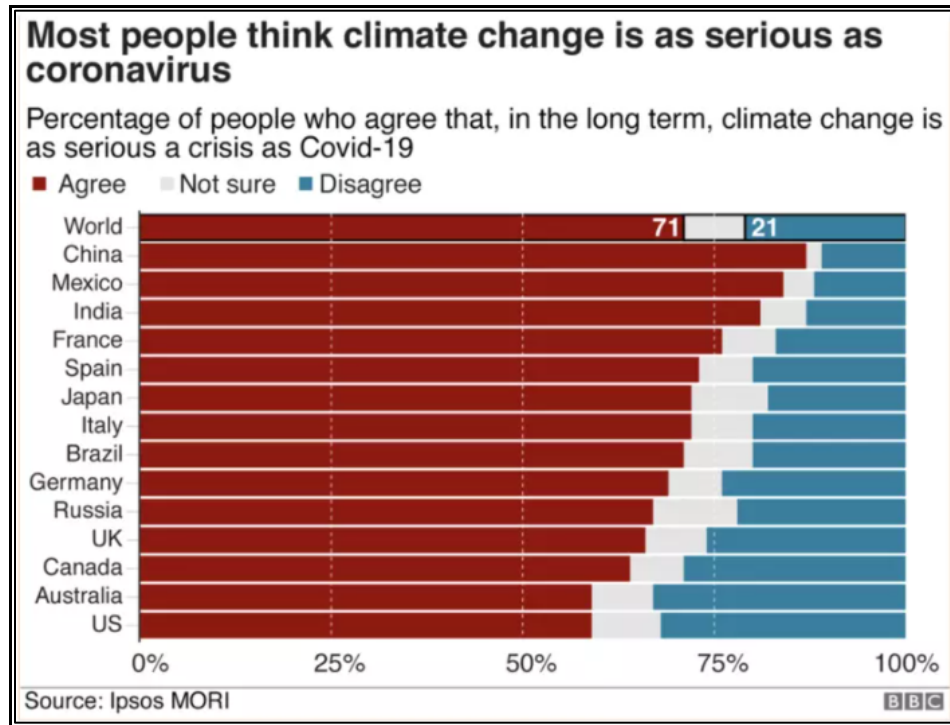


Figure 2. There is a global consensus that climate change is just as serious of an issue as the coronavirus (Metzke, 2020).

Community Engagement

Community engagement is critical for any systemic change, as people remain at the heart of societal transformation. While social mandates and political action from the top down are also required, people's behaviors at the grassroots level are what first spark transformative movements. Engagement of diverse community groups is important because it allows for equity by giving everyone a voice (McNiel, 2019). Without it, we risk the continuance of isolated lifestyles that won't be enough to implement any action—be it for COVID or climate change.

Community engagement entails that the community is encouraged and allowed to take part in the decision-making, deliberation, discussion, and the implementation of the projects or programs affecting them (Bassler et al., 2008). Isolated action by governments can lead to

poorly planned policies that may encounter resistance (Corner, 2020). Engagement leads to a strong social mandate which then opens the potential for transformative climate policies, thus leading to corporations, organizations, and institutions to make right choices easier as they become more compelled to transform their behaviors for the sake of the community (Corner, 2020).

Community engagement can essentially shift social norms to more sustainable behaviors for supportive policies. Deep-rooted beliefs and politics underlie every decision made by a person, and these must be understood for people to be engaged effectively (Corner, 2020). When dealing with a crisis, social cues provide valuable and trusted information, so pertaining to individuals' emotions and values is crucial for effective engagement (Geiger et al., 2021). Studies have shown that people generally set out on a cognitive mission to bring back reasons to support their values or beliefs (Haidt, 2021). Effective communication speaks more to people's values rather than on facts and figures, so messaging must be tailored to accommodate different groups within a community (Webster et al., 2020).

Some researchers believe that climate change concern, specifically, is driven by country-specific factors like media coverage, political action, and national prosperity, while others argue that it is driven by individual factors like knowledge, culture, political orientation, beliefs, and proximity to climate change-susceptible areas (Shi et al., 2015). It is important that we understand the responses of others so that we can customize how we communicate and the methods we use.

The pandemic has forced people around the world to adopt different behaviors, and effective leadership and communication are necessary to reach a community so that they take action. By observing our national and local efforts to communicate the pandemic, we can take what we've learned and hone our communication strategies for climate change. A sense of shared collectivism is important for adherence to changes in lifestyles, though cultural and societal factors are also important in understanding responses at both national and local levels (Whomsley, 2021). It is possible that engaging with the identity of a place or group can help us to engage with the collective identity as a whole. However, given the

differences within each municipality, messaging must also be tailored in order to cater to different groups.

How are people perceiving the pandemic?

By conducting surveys throughout the pandemic, we have been able to analyze how perceptions of climate change and COVID have varied in recent times. Nearing the end of 2019, there was a sudden fall in climate change interest due to pandemic lockdowns, economic insecurity, and lack of media and political attention (Corner, 2020). But as of spring 2020, global polling started showing that climate concern remained high in the U.K. and the U.S. and was still considered as serious an issue as COVID-19 (Corner, 2020). But even though climate change concern remains high, this is just the starting point for public engagement. The pandemic has highlighted that people are willing to change their lives in response to a crisis, where their altruistic behavior works for a greater cause. As of July 2020, Canadians agreed that despite economic slowdowns due to the pandemic, now was the time to be ambitious about climate change, reasoning that climate change can't wait and there was an opportunity for a more sustainable economic reboot (Nanos, 2020) (Figure 3).

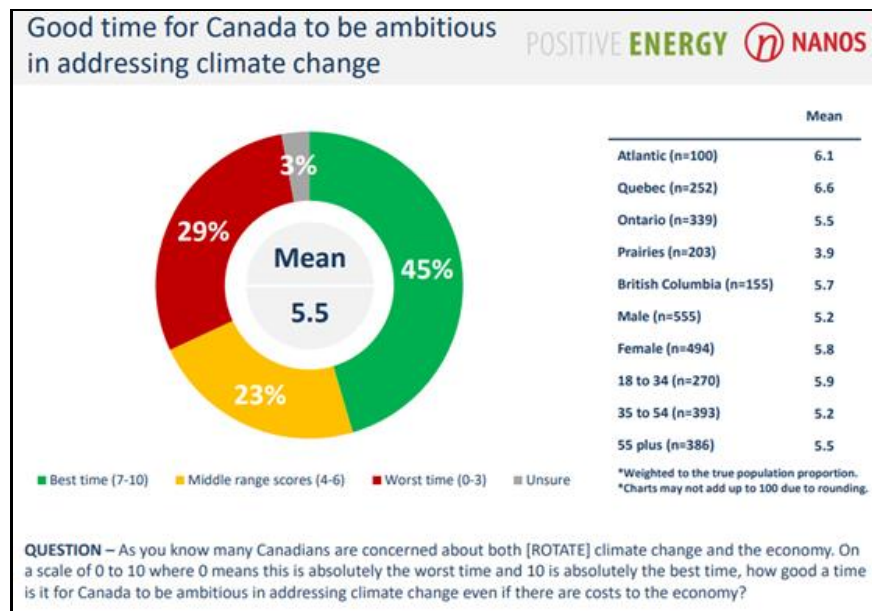


Figure 3. As of July 2020, Canadians believe that even after the economic downturn following the start of the pandemic, now was the best time to take climate action (Nanos, 2020).

A survey of 1,049 Canadians was conducted via telephone between June 28 and July 2, 2020, where respondents were geographically stratified to represent Canada. Results showed that opinions varied provincially, especially when it came to support for growth in oil and gas (greater in the Prairies and less in Quebec); however, overall opinions were comparable to those in 2019. Compared to 2015, fewer Canadians were supportive of the development of fossil fuel resources (Nanos, 2020). But one in two Canadians say that environmental protection should take precedence, even if it causes slower economic growth and the loss of jobs, while 39% maintain that creating jobs should be top priority. It was also observed that younger Canadians (58% aged 18 to 34) were more likely to prioritize the environment while Canadians from the Prairies were likely to prioritize economic growth and jobs (Nanos, 2020). This further proves the motivations of different individuals driven by province-specific factors.

There is a striking difference in how countries perceive the two crises, as was exposed in an IPSOS poll conducted in 23 European countries between October and November 2020 with more than 22,000 participants aged 15-35. In a question of what they believed to be the most serious problems facing humanity, climate change (46%) and environmental degradation (44%) were ranked the highest by respondents (EEB, 2021). What's more is that climate change ranked 10% higher as a major concern over the spread of infectious diseases, even while the pandemic was ongoing. Many of those who did not rank climate amongst their top priorities were still concerned about it, with a total of 84% saying they were worried and 65% believing it could affect them directly (EEB, 2021). In April 2020, global polling also showed that climate concern remained high and was considered as a more pressing issue than COVID-19 (Corner, 2020).

That being said, COVID-19 has provided us with a chance to analyze responses to a crisis to pinpoint the best ways to engage communities despite their differing qualities. The pandemic has given the world an opportunity to 'build back better,' rather than continuing with the 'business as usual' trajectory. It appears that despite the pandemic, many countries believe that the pandemic has opened an opportunity to take climate action, though this would require political action, just as the pandemic did. A global G20 survey

was conducted between April and May 2021 in which two-thirds of people were found to support global cooperation to take climate action, but that varied nationally, with China the most enthusiastic, and France the least. But in the entirety, 74% of people agreed that we need to focus less on economic growth and focus more on the health and well-being of people and nature. COVID has opened the door to change as 75% agreed that the pandemic demonstrated how rapidly our behaviors can change and 71% agreed that the pandemic recovery offered a unique opportunity to make pro-environmental changes (Watts, 2021).

In Spring 2020, a case study was conducted with sustainability science majors at Furman University to see how these students interpreted the pandemic and what they saw happening in the future. Both COVID-19 and climate action require systems thinking, collaborative efforts, values thinking, strategic thinking, and futures thinking (Quinn et al., 2021). Overall, the students wanted post-pandemic progression in the form of global cooperation and resiliency; the formation of just and resilient climate systems, health systems, and agricultural systems; paradigm shifts in values, attitudes, consumption patterns, and system structures; and a holistic well-being for human and environmental health that moves past the current 'business as usual,' mindset (Quinn et al., 2021). But while these students were able to recognize the importance of systems and institutional change, there were notable shortcomings in their ability to define actionable steps to execute any significant transformations (Quinn et al., 2021). This goes to show that we need to work to educate and engage the public about a crisis in a way that eliminates any grey areas that are cause for miscommunication and inaction.

The transformations described above would require policy change and effective communication from our leaders, both nationally and locally, as well as the education of the public. A U.K. project conducted in various coastal communities found that social learning and knowledge exchange were identified as the most successful techniques for rapid responses to change during the pandemic. Knowledge exchange, in combination with broadened participation, helped to better engage the public (McKinley et al., 2021). Communication about a crisis should not focus on one-way knowledge transmission, as this will not increase public concern, but rather, action-related knowledge has a significant

impact on willingness to adjust behaviors. Long-term sustainability requires a diverse agenda, and innovation must be harnessed by engaging communities and businesses using integrated community planning processes. These processes are critical if communities want to achieve integrated health and sustainability strategies, as they involve identifying ecological, social, and economic objectives and reconciling these imperatives (Newell & Dale, 2020).

During a crisis, when information is inconsistent or unavailable, there is an increase in human desire for transparency, guidance, and reassurance (Mendy et al., 2020). The speed and scale of the pandemic have bred uncertainty and emotional disruption for many people, and how leaders communicate about it can help to catalyze positive change (Mendy et al., 2020). A top-down approach is necessary for successful implementation of societal changes, which requires a strong and sustained social mandate (Corner, 2021). Many countries have become divided due to the virus as political polarization has been tearing apart top-down governments.

The combination of frustrated citizens, polarized media, and insufficient communication has led to division amongst many countries, including India, Brazil, and the United States. In India, some news outlets blamed Muslims for the coronavirus as an outbreak was traced to an Islamic missionary event (Quarcoo & Kleinfeld, 2020). Brazilian president Jair Bolsonaro rejected the gravity of the virus which sharpened the country's ideological divisions (Quarcoo & Kleinfeld, 2020). Finally, polls from early March 2020 showed that partisanship was the biggest predictor of U.S. citizens' perception of the virus. Quarcoo and Kleinfeld (2020) argue that despite this polarization, the virus could potentially be a cause for unity amongst nations. A poll conducted in the U.S. near the start of the pandemic found that 90% of Americans felt that "they were all in this together," while 82% believed they had more in common than what divided them (Quarcoo & Kleinfeld, 2020). The media does have power to influence levels of education and empathy amongst citizens, but only if politics and the media could portray a superordinate sense of identity to bring people back together (De-Wit et al., 2019). This goes to show the importance of a sense of collectivism when acting against a crisis. While there are political seeds that drive polarization,

solutions can be found by simply understanding social psychology and by encouraging a genuine exchange of ideas between individuals.

While the world has been hit with waves of the pandemic for over a year and a half, several countries have been applauded for their reactions to the pandemic. New Zealand was one of the first countries to lock down, but aside from their geographical advantages, it was their communication strategies that contributed to their success. With the help of clinical psychologists, they wanted to create a sense of unity to tackle the pandemic and to avoid a “top-down” approach as a call to participate (Hunt, 2021). They recognized that information design was critical because decisions are only effective as people understand it—they wanted to engage people but not alarm them. Media was informative and easily accessible and was made to be more light-hearted to grant people respite from stress and anxiety (Hunt, 2021). Overall, the country saw remarkable cohesion as people united to do the right thing. Political leaders were appreciated for their honesty and transparency.

Another marked reaction to the pandemic was Germany, who were champions in scientific communication and policymaking. Germany is an example of the importance of scientific communication as its chancellor, Angela Merkel (a scientist herself), broke down the complex topic to the public (Farr, 2020). The country had fair numbers of people who still fought lockdowns; however, it also had scientists communicating regularly and openly with the public and the government was clear from the start what their rules were (Farr, 2020). Additionally, children were educated via popular TV shows while the country’s top virologist created a podcast that was followed by millions. Germans themselves are observed to be fact-based and cautious, so Merkel’s straightforward, scientific approach resonated with them as she constantly provided data-driven updates and relied on experts as much as possible (Farr, 2020).

Tactics that may work for one country won’t necessarily be successful in another. In Canada, most people have an affinity to their province and regionalism is expressed in differing attitudes to both crises. While top-down leadership is required for decision-making and policy enforcement, understanding the community’s perception of a crisis is

critical for the implementation of effective action because public concern is ultimately the precondition for informing people and increasing their willingness to change their behaviors (Shi et al., 2015). It seems that in Canada, the best way to reach people is through regional-based examples of climate impacts, such as wildfire and drought. People will feel a variety of emotions throughout the pandemic as they are forced to adopt different behaviors, but community-led strategies will help to map local concerns and ensure that all voices are heard (Burgess et al., 2021). Given the complexity of both COVID and climate change, the pursuance of a resilient future may lie in even more local responses, catering to the economic and social differences of each municipality (Selby and Kagawa, 2020).

Tracking Feelings during COVID-19

People will continue to have intense, personal experiences following the pandemic that will continue to leverage relevant climate change action. We must build upon these behavioral shifts that will persist after the pandemic and push them towards more sustainable sources (Pinner et al., 2020). The opinions of British citizens were tracked throughout 2020, and comparative surveys were released at the end of the year describing how feelings have changed in pre-pandemic February, and then May and September. The 'Britain Talks Climate' study found that by May there was a major shift in the amount of people who agreed that we had to look after one another, with every political group showing positive changes. The positive shift was slightly lowered in September, perhaps when the feelings of fatigue and stress were high due to the constraints of COVID policies (Climate Outreach, 2021). It was noted that there was a decline in hope amongst the more optimistic segments, alongside much greater uncertainty and a decline in fear (Climate Outreach, 2021). But one of the most consistent findings of the study was that people, in general, did not want to return to normal. Many hoped for positive change, though this slightly decreased in September, assumed to be from negative feelings associated with the lockdown rules (Figure 4).

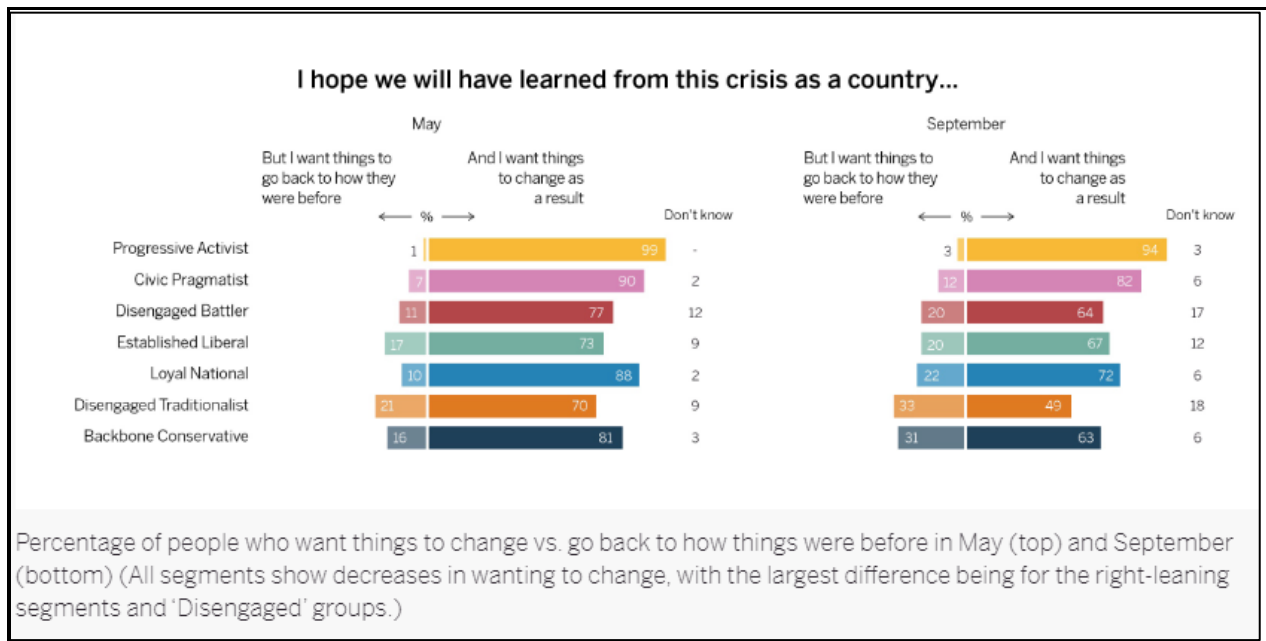


Figure 4. A survey conducted by Climate Outreach shows the percentage of people who want things to change versus returning back to normal, pre-COVID times.

After tracking the opinions of people throughout the pandemic, it becomes glaringly obvious that the public is not a homogenous entity, but rather it is composed of complex individuals with differing values. This became clear during the COVID-19 vaccine rollouts to communities who had different patterns of health literacy, values, and expectations (Burgess et al., 2021). Rollouts were met with many hesitant groups with myriads of reasons as to why they were vaccine resistant. One of those reasons was that there was little confidence that the government would protect the people. In fact, a study in the U.K. found that more than 60% of black people did not believe that their health was protected by the National Health Service to the same extent as white people (Burgess et al., 2021). Minority groups are disproportionately burdened with higher levels of illness due to their social vulnerability from low socioeconomic statuses and less-than-optimal living conditions (Akintobi et al., 2020). Policy makers need to recognize inequalities and diversity in order to adopt a local approach that will give communities a voice.

A CBC news video was released in September 2021 describing the ways in which we can reach minority groups that are disproportionately affected by COVID. The video was centered on Latinx (Latinos/Latinas) populations in Toronto, Ontario, a community that is

largely unvaccinated due to hesitations. Members of this community are nearly 7 times more likely to contract COVID than their white counterparts (Gerster & Ng, 2021). In a race to get vaccinated, health workers were using hyper-focused and hyper-local strategies to get people engaged so that they would get vaccinated. This involved building trust with the people by speaking their language to answer their questions and ease their doubts. Posters and Spanish-speaking professionals were placed in places of work or in transit stations, as the media could not be relied on to reach these groups (CBC, 2021). While persistence and dialogue helped to sway the hesitant, it was also useful to set up more easily accessible vaccine clinics that didn't require government identification. It was also found that in order to reach the Latinx groups, a sense of altruism must be conveyed—teaching them that getting vaccinated and wearing masks is for the safety of others, not just for themselves (CBC, 2021). In another example, widespread community dialogues were effective for Nigeria's polio eradication efforts as well, as they helped to foster social learning, establish equity, and generate trust (Burgess et al., 2021). And now the pandemic has presented us with an opportunity to reprioritize approaches toward advancing engagement of all groups.

In order to maintain compliance and figure out the best plan of action in the face of a crisis, we must understand how different groups are reacting. A study was conducted by King's College London in April 2020, categorizing respondents as either 'accepting', 'suffering,' or 'resisting' in terms of their reactions to the pandemic. The findings were that there was widespread uniform support for lockdown measures, though reactions differed immensely. Duffy & Allington (2021) found that in general the likelihood that a person was to resist lockdown measures decreased gradually with age. Additionally, feelings of 'suffering' were more evenly represented across the age distribution, though women were more likely to experience feelings of suffering (Figure 5). These attributes thus prove that behaviors change when social norms shift, reflecting people's concerns and capacity to make change (Webster et al., 2020). It is likely that as the pandemic continues there will be growing poles of opinions, therefore it is recommended that another survey be conducted presently to gauge how opinions have changed since the start of the pandemic. The growing poles of opinions highlights the importance of tailoring messaging to different groups based on

their demographics and individual traits, or in the case of this study, gender and age. By tracking their change in opinions overtime, we can find a more suitable way to keep local groups engaged in the face of another crisis, like that of climate change.

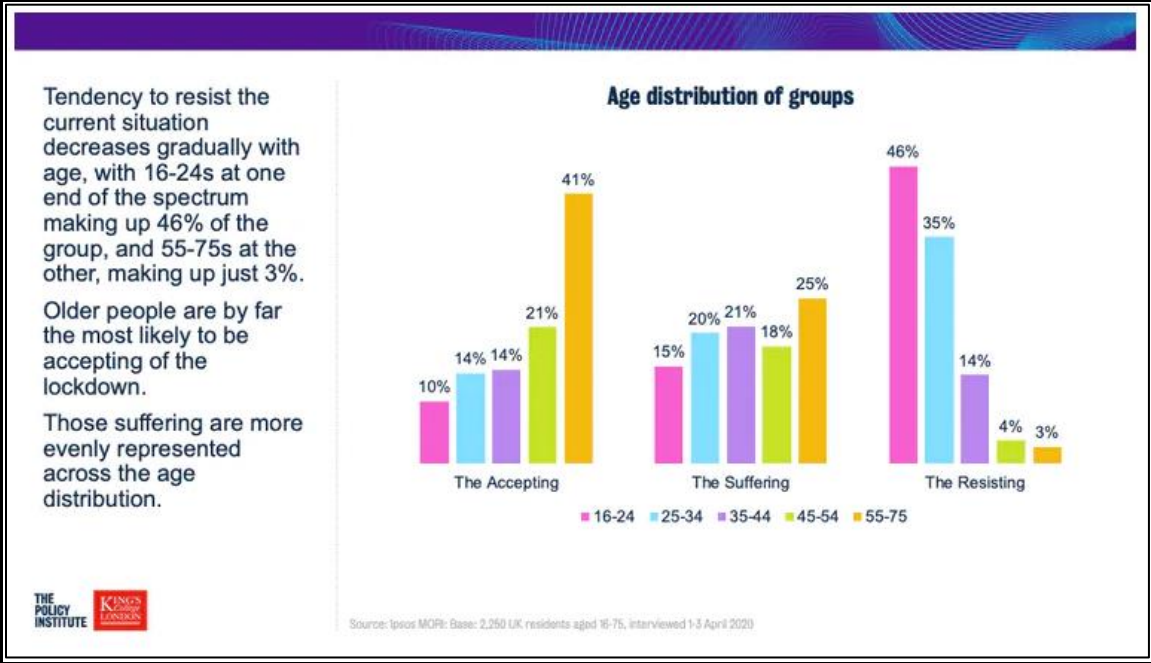


Figure 5. The three groups of people were placed into groups reflecting their opinions on the coronavirus as ‘accepting,’ ‘suffering,’ or ‘resisting’ in a survey conducted amongst 2,250 U.K. residents aged 16 to 75 in April 2020.

Another study was done with U.S. adults who were paid to participate, though the sample population was not representative of the U.S. public as almost all of them held high school diplomas and 82% had a college degree. They were asked to set a level of agreement with 29 statements regarding COVID-19 and climate change. Their results showed that most participants were more alarmed about the pandemic than with climate change, though they perceived many similarities between the two crises, including their harm to public health, their political polarization, their global effects, the fact that they are both human-caused, and that there were solutions to both (Geiger et al., 2021). The participants mostly related COVID-19 as short-term with immediate impacts while climate change was long-term with delayed impacts. But despite these disparities, most people expressed greater agreement that the two crises should be addressed simultaneously rather than waiting until the pandemic had ceased. Many also agreed that with respect to both crises there was

incompetent government response and that others were not taking the issues seriously. It was also found that many doubted the severity of the pandemic, and that they had similar doubts about climate change, suggesting that there may be mistrust of risk communicators. The findings of this study further represent an initial exploration into what can be learned from COVID-19 that can be correlated to climate action. The comparison of the crises can prompt fruitful avenues of communication for public engagement on both topics (Geiger et al., 2021).

Conclusion

Moving forward, we can take what we have learned from the pandemic and find constructive solutions to work together to take actions against climate change. The pandemic highlighted people's ability to work together and build 'collective efficacy', thus showing the world that individual change is a crucial part of a wider systemic change (Webster et al., 2020). A strong social mandate is needed to implement policies, but messaging must be catered to different groups at the grassroots level, as a bottom-up approach. If there is anything that we've learned from the current COVID-19 crisis, it is that policies require strong public engagement, and that people need to understand the nature of the issue before they are willing to tolerate constraints on their lives or provide the government with a mandate for action (Marshall, 2021). When people aren't engaged, this can lead to denial and distrust that spreads through real-life conversations and the media. Communication requires a sustained approach involving the recruitment of authentic and trusted communicators, tailoring messaging to different audiences, training scientists and politicians to speak skillfully, and finding valuable ways to reach people (Marshall, 2021). Now is the time to build on the behavioral shifts felt during COVID that will persist after the pandemic and push them towards more sustainable sources (Pinner et al., 2020). And now the pandemic has provided us with an opportunity to study the best ways in which we can engage the public and our communities.

Recommendations

While studying the importance of community engagement is still at its early stages, we can use lessons learned from the pandemic to address gaps in community resilience by integrating more effective ways to engage the community at grassroots and national levels.

There is no one-size-fits-all approach to community engagement, so strategies must be tailored locally to accommodate different groups. To start, we need to continue to analyze behavioral changes throughout the pandemic, as work to find the most effective ways to engage with communities regarding crises topics. Additionally, a survey should be done to determine the relationship between climate change knowledge, cultural worldviews, and behavioral outcomes, such as a person's willingness to change. Further recommendations to better community engagement strategies are as follows:

- Conduct ongoing surveys as behaviors change throughout the pandemic;
- Local and national governments need to intervene in current development paths and work to effectively educate, engage, and communicate with the public, including:
 - Creating a strong social mandate to implement policies,
 - Encouraging knowledge exchange and broad participation, and
 - Finding grassroot-level strategies to map local concerns.
- Tailor messaging to accommodate different groups within a community (Webster et al., 2020);
- Recognize diverse groups and adopt comprehensive local approaches that strengthen public engagement (Burgess et al., 2021);
- Inform local and national governments on effective leadership strategies to tackle problems with cultural sensitivity, and teach them how to communicate messages about climate change and COVID-19 (Whomsley, 2021);
- Structure and apply scientific information at the community level using localized scenarios that are understandable and meaningful to the public;
- Leaders should call upon professionals to help clarify information (Sheppard et al., 2011);
- Localize crisis scenarios to allow for the analysis of impacts;
- Use hyper-focused and hyper-local strategies to get people engaged and to build trust;
- Continue to compare the crises, and keep surveying communities to gauge how opinions have changed;

- Use media influence to spark community engagement and learning;
- Maintain a positive outlook on crisis topics and make visualizations to help communicate and disclose information clearly to attract and retain interest (Sheppard et al., 2011);
- Provide the community with a sense of collectivism that help motivate people to change their behaviors;
- Ensure ongoing collaboration, mutual support, and compassion, as these are strong predictors of proactive behaviors; and
- Be optimistic and objectively hopeful while continuing engagement efforts for climate change action.

While we are still navigating through the pandemic, we should continue to learn from this experience so that we can develop a better path forward. Despite discrepancies in responses and feelings towards COVID-19, it is most commonly agreed that now is the best time to act against climate change. The best way to do this is to educate and engage the public which works best through effective communication at the local level.

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