

RESEARCH ARTICLE

Rich kids of Europe? Social basis and strategic choices in the climate activism of Fridays for Future

Donatella della Porta^{1*} and Martín Portos^{1,2} 

¹Faculty of Political and Social Sciences, Scuola Normale Superiore, Florence, Italy and ²Department of Social Sciences, Universidad Carlos III de Madrid, Getafe, Spain

*Corresponding author. Email: donatella.dellaporta@sns.it

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Abstract

In 2018, Swedish teenager Greta Thunberg began a school strike that quickly spread across the globe. After a ritual strike every Friday by school pupils to call for urgent action against climate change had gone on for several months, what had become Fridays for Future (FFF) called for various global days of action throughout 2019, bringing millions of people out onto the streets in the largest climate protests in world history. Drawing on unique protest survey data on FFF events across European cities in 2019, this article explores the structural bases of organized collective mobilization for climate justice. Nuancing narratives that focus on either the privileged background of climate justice protesters or the environmentalism of the poor, our results show the heterogeneity of the social composition of the protests, suggesting the need for cross-class alliances for mass mobilizations. Moreover, our analysis reveals that the social background of protesters shaped their attitudes regarding what institutions and approaches can be relied upon to tackle climate and environmental challenges. This suggests an important and under-studied connection between social background and the strategic choices of environmental movements.

Key words: climate change; Fridays for Future; protest; social class; social movements

The social basis of climate change activism: an introduction

Climate change has created an unprecedented global environmental threat, becoming the greatest challenge ever to have confronted human social, political, and economic systems (Dryzek *et al.*, 2011). Indeed, as Togami and Staggenborg (2019) note, ‘a catastrophic emergency... is happening now – glaciers are melting, coral reefs are bleaching, and countries all over the world are experiencing extreme weather events such as devastating floods, fires, and storms’. In response, collective mobilizations calling for effective and coherent climate change mitigation policies have been staged around the world. In the second half of the 2010s, protests for climate justice notably intensified in Europe. Prominently, in 2018, the Swedish teenager Greta Thunberg started a school strike that rapidly spread across the globe. After school pupils had ritually gone on strike every Friday over several months to call for urgent intervention against climate change, on 15 March 2019, Fridays for Future (FFF) organized a global day of action for climate justice that saw 1.6 million protesters participate worldwide (Wahlström *et al.*, 2019). In September 2019, the third FFF global day of action brought 7.6 million participants out onto the streets in 6000

protest events across 185 countries as part of what can be considered the largest globally-coordinated climate protest in world history (de Moor *et al.*, 2020, 2021).¹

Framing the struggle as oriented toward establishing climate justice, the activists went beyond traditional defense of the environment, bridging ecology and social justice. To what extent is this transformation in framing reflected in the social basis of those who participated in the global strike for climate? Broadly speaking, we know that throughout history, economic and political shifts have been closely associated with the rise and fall of social movements (Chase-Dunn and Almeida, 2020). The weakening of ‘old social movements’ has been understood alongside a pacification of the class cleavage, shifting the focus toward ‘new social movements’ (della Porta and Diani, 2020). While labor unions and blue-collar workers in ‘old’ social movements asked for a more equal redistribution, in ‘new’ social movements, the emerging middle classes seem to mobilize around post-materialist values and cultural issues (Inglehart and Catterberg, 2002; Eggert and Giugni, 2012, 2015; della Porta and Portos, 2020, 2022). Although this narrative has been contested, especially in the context of the global justice movement and anti-austerity protests (della Porta, 2015), we know little about the social bases of protest in transnational, coordinated events addressing climate justice.

It has been argued that university-educated, resourceful, and relatively privileged people in the global North (often employed in socio-cultural and caring occupations) are overrepresented in environmental movements (Cotgrove and Duff, 1980, 1981; Kriesi, 1989; Giugni and Grasso, 2015), yet there is little existing research on the climate justice movement specifically.² There is, however, a growing interest in the intersection between environmental destruction and social injustice, given that global warming disproportionately harms billions of the world’s poor and those marginalized by global capital (see Almeida, 2019). Moreover, opposition to international capital in the transnational arena is not only led by the global justice movement and the World Social Forums but also, and increasingly, by the climate justice movement (Almeida, 2019).

This article draws on unique survey data collected by an international collaborative network of scholars who interviewed those ‘caught in the act of protest’ in the FFF marches that took place in 13 European cities in March 2019 and 16 European cities in September 2019 (see Wahlström *et al.*, 2019; de Moor *et al.*, 2020). We use that protest survey data base to explore the structural bases of organized collective mobilization among climate justice protesters. In line with existing research on other movements – for example, the global justice, anti-austerity, and secessionist mobilizations (see, e.g., Chase-Dunn and Reese, 2007; della Porta, 2015; Giugni and Grasso, 2019; della Porta and Portos, 2020, 2021) – in the case of contemporary climate activism, we identify heterogeneity in terms of social composition and the potential to forge cross-class coalitions in order to build a mass movement. While young, educated, middle-class people are overrepresented in, and are often leading, the climate school strikes and mobilizations, these protest events involves people from a variety of social groups, including the urban working classes. Moreover, existing research (Giugni and Grasso, 2019) suggests that we should expect class composition to influence activists’ preferred strategies for achieving climate justice and to shape their reliance on different institutions and actors to cope with the climate emergency and environmental threats. In this case, we find that class belonging does not seem to have an impact on activists’ perceptions of science and lifestyle choices with respect to the handling of environmental issues. However, our results do suggest that upper-class protesters tend to rely on governments and companies in solving environmental problems to a greater extent than do working- and middle-class activists.

¹Greta Thunberg powerfully appealed to global leaders at the annual World Economic Forum in Davos in January 2019: ‘I want you to panic. I want you to feel the fear I do. Every day. And I want you to act. I want you to behave like our house is on fire. Because it is’ (<https://www.theguardian.com/environment/2019/jan/25/our-house-is-on-fire-greta-thunberg16-urges-leaders-to-act-on-climate>). This message had an important symbolic component: a teenage, female activist bluntly urging political and business elites to take action to address climate change.

²With some exceptions, e.g., Wennerhag and Hylmö (2021).

This article is structured as follows. In the next section, we review the existing debates on social class and mobilization against climate change. We then present our protest survey data on the FFF events across Europe in 2019 and describe the social bases of organized dissent for climate justice. Following that, we explore how social class-belonging affected FFF protesters' confidence in various approaches to facing the environmental threat; approaches that rely on *science*, those that trust *governments*, those that put faith in *companies and markets*, and those that focus on *individual lifestyle choices*. We conclude by summarizing our main arguments, assessing the key implications of our analysis, and suggesting potential avenues for further research.

Social class and climate change

The relevance of social class to movements is not restricted to discussion of labor protests; the analysis of class composition and its effects is important for understanding contentious politics in general (della Porta, 2015). This remains true with respect to the environmental movement. For a long time, concerns for the economy have been pitted against those for the environment (Elliott *et al.*, 1997; Harring *et al.*, 2011) but the reality has emerged as more complex than a relationship of simple opposition. The received wisdom has been that the salience of the climate issue for individuals is related to a number of aggregate-level 'objective variables' (Lewis *et al.*, 2019), such as economic affluence (Kim and Wolinsky-Nahmias, 2014), a country's level of vulnerability to climate change, levels of income (Dunlap and York, 2008), unemployment, and the perception that one's economic situation has worsened. In contrast with those expectations, studies have found mixed results and been largely unsupportive of the income-climate concern argument (Lewis *et al.*, 2019; Uba *et al.*, 2021).

Given the heterogeneity of environmental protests, it is not surprising that different narratives of their class compositions are identifiable in the social science literature. Broadly speaking, we can distinguish between two polar visions of the social bases of environmental protests, which have been associated with different theoretical approaches and empirical foci. On the one hand, in the so-called 'new social movement' approach, which attempts to account for the plethora of new movements that emerged in post-industrial Western societies since the mid-1960s, environmental protests have been considered as the carriers of a new class opposition. In research led by Alain Touraine, the promoters of the 'anti-nuclear prophecy' had the potential to become the main oppositional class in a programmed society in which the dominant class was defined not by the ownership of the means of production but rather by the control of knowledge (Touraine *et al.*, 1983). While scholars such as Alberto Melucci (1996) noted that the new social movements were quite different in their relations to class, with actors mobilizing in line with convictions rather than their structural positions, empirical research singled out the dominance of an emerging middle-class component, characterized as highly educated and involved in the service sector – the so-called 'cultural specialists' who, on the basis of their daily work experiences, tend to develop 'left-libertarian' values (Kriesi, 1989; Hutter, 2014). These factions of the middle classes have been considered as dominant – both in terms of numbers and their influence – in the environmental movement in particular (Rootes, 2003, 2005). Indeed, environmental activists have often been portrayed as 'disproportionately highly educated, employed in teaching, creative, welfare, or caring professions, and, especially, the offspring of the highly educated' (Rootes and Brulle, 2013: 3). This class composition is mirrored not only in the extra-institutional but also in the electoral domain. Research on the voters for Green parties tended to confirm that, at least in countries like Germany and the UK, their supporters overwhelmingly have a middle-class background (Poguntke, 1993; Dolezal, 2010; Dennison, 2017).

Environmental protests, especially since the early 2000s, have also been studied as expressions of local opposition to the high environmental impacts of some uses of territories. Social science literature on Locally Unwanted Land Uses (the so-called LULUs), has pointed to the mobilization of different social groups in inter-class alliances oriented to defending public uses of a territory

against exchange uses. Examples include the Italian protest campaigns against the TAV (High Speed Train) in Val Di Susa and the bridge over the Messina straits (della Porta and Piazza, 2007). These environmental conflicts – at times stigmatized as examples of Nimbyism (Not in My Backyard) – involved traditional middle classes, workers, and professionals, as well as rural working class people. These territorial mobilizations developed as mobilizations of entire communities, characterized by different class mixes according to their location. Where the public bad has been located in poor areas, as has often been the case, many struggles (such as those against waste incinerators or polluting production) have involved activists from lower classes in examples of what has been described as an ‘environmentalism of the poor’, aimed at defending livelihoods against the threat of resource extraction (Martinez-Alier, 2014; Martinez-Alier *et al.*, 2014, 2016). What has been referred to as ‘popular environmentalism’ (Martinez-Alier *et al.*, 2014) against agroecology, permaculture, and nuclear energy has also been characterized by broad social bases. Additionally, environmental and radical imaginaries have unfolded in social movements in crisis-ridden contexts (Asara, 2020), and the parties that have emerged from such movements in recent times (such as Podemos and its electoral allies in Spain) have tended to combine ecological and class discourses, attracting wide support amongst precarious workers (della Porta *et al.*, 2022).

Empirical research on the environmental movement has rarely compared these two very different narratives of the social bases of environmental protests, as the field of study has been characterized by a growing divide between those studying mainstream green politics and those who instead have addressed local conflicts that bridge concerns with environmental disruption and social inequality. Building upon these two streams of research we can, however, identify some important connections between class bases and various other characteristics of environmental groups, with different class bases having an affinity with different organizational forms, repertoires of action, and framing.

Research on the NGO-ization of environmental conflicts has revealed that organizational bureaucratization is associated with a moderation of goals and a move to conventional forms of action (Rootes, 2003; Diani, 2005; della Porta and Diani, 2020). Larger NGOs, in particular, tend to attract donors among the wealthy and the middle classes, and rarely contemplate the ‘environmentalism of the poor’ as a source of material resources. International campaigns are chosen primarily on the basis of their potential for success (Bob, 2001), and there is some cooptation within the so-called ‘green economy’ as part of a vision of environmental modernization. In the context of a search for a middle-class constituency, environmental organizations also tend to prefer consensual aims, accepting market solutions and collaboration with for-profit industries. The characterization of environmental movements as single-issue, meanwhile, tends to overlap with a focus on post-materialists as their principal potential constituency. At the same time, opposition between environmentalists and trade unions tends to be reproduced, with the intersection between environmental destruction and social injustices disregarded.

In contrast to bureaucratized environmental groups, studies on struggles against LULUs have identified highly contentious forms of action, constituting a sort of SMO-ization of environmental mobilization. Grassroots groups have developed in opposition to large infrastructure projects (which are perceived for many people as useless), with actors using disruptive repertoires of protest, including civil disobedience. Grassroots actors have often shifted the scale of their claims, bridging local and territorial issues with social, economic, and political ones (della Porta and Piazza, 2007), at times embracing the perspectives of the environmental justice movement (Martinez-Alier *et al.*, 2016; Bertuzzi, 2019). At the international level, NGOs located mainly in the global North began to be contested by Southern ones as the environmentalism of the poor became more visible and connected in opposition to the negative effects of developments such as the construction of large dams, chemical pollution, and the use of pesticides, among others.

In such activism, horizontal structures have often characterized attempts to prefigure different forms of democracy. Repression has strengthened collective identification, increasing transnational visibility and networking. Environmental justice has developed as a particularly prominent frame that combines social and ecological concerns. In many such struggles, the framing has targeted the higher environmental costs paid by ‘the poor’, both within so-called advanced industrial countries and between the global North and global South. Claims for environmental protection have subsequently become widespread, especially against the expropriation of land and other natural resources by large companies, who have been accused of contributing to increased social injustice and destroying nature. With capitalism held as responsible for the production of inequalities and, at the same time, destruction of the commons blamed on environmental pollution, anti-capitalism became a master frame.

These transformations are all the more visible in the specific case an environmental contentious politics articulated around climate change (Hadden, 2015). A reformist discourse of environmental modernization developed after the earth’s global limits had been first thematized by the Club of Rome in its 1972 report ‘The Limits to Growth’,³ which emphasized the planet’s finite resources and the risk of exceeding its carrying capacity. Environmental issues have been considered then tractable problems within the industrial society (Dryzek, 2013: 73), with experts guiding environmental policy through pollution control agencies that have been oriented toward regulation and the cost-benefit analysis of risk. The dominance of (Northern) NGOs has been challenged, however, as protest networks have expanded, with NGOs from the South becoming a larger and more vocal presence. As Jennifer Hadden (2015) recounts, more radical groups converged in the mobilization of the counter-summit to the 2009 UN Climate Change Conference in Copenhagen, using street protests which included attempts to penetrate the red zone (though without stopping the summit). With respect to its organizational forms, the climate justice movement has stressed grassroots, polycentric networks, which can be understood as expressions of the desire to embody participatory forms of democracy.

The framing of the environmental issue has also changed, with climate justice being conceived of as referring not only to the environment but also to social justice. As the network of organizations extended beyond environmental groups, climate justice actually became a master frame for many social movement organizations and activists, who increasingly voiced a critique of capitalism that held it as a cause for the many injustices that brought about the destruction of nature (Hadden, 2015). The call became one for a restitution of the ecological debt of the North to the South, as well as for food sovereignty; before, during, and after the UNFCCC Copenhagen counter-summit, climate change was addressed as a social issue in the context of the unequal distribution of the costs for environmental destruction. Faced with the increasingly clear and dramatic consequences of climate change in the global South and on the poorest sectors of the population, the claims for climate justice have pointed to the need for radical and urgent solutions with indigenous peoples front and center. More radical positions have included the calls for de-growth and political ecology through a shared sense of urgency; to build ecological subjectivities, natural relations with the environment and to increase the agency of citizens; and for cultural changes toward ecological consciousness and away from the destruction of rain forests and the privatization of common land. Indeed,

‘critical scholars and activists have now been contending with a widely recognized convergence of global crises... The issues have intersected decisively, with staple food sources proving inaccessible for the world’s poor, banks foreclosing on the most vulnerable, fuel sources causing war and impacting migration, and climate change-related instabilities shaking low-income communities to their core’ (Tramel, 2018).

³See <https://www.clubofrome.org/publication/the-limits-to-growth/>.

Before the UNFCCC Copenhagen Summit in 2009, activists printed and distributed pamphlets that encapsulated this social justice-centered framing of the climate issue. A pamphlet – which was entitled *Why Climate Change is Not an Environmental Issue* – stated in its introduction: ‘This pamphlet looks at climate change from the angles of capitalism, militarism, nuclear energy, gender, migration, labor & class, and food production. Climate change is not just an environmental issue. It is but one symptom of a system ravaging our planet and destroying our communities’ (cited in Hadden, 2015: 118). While the failures of the official 2009 UNFCCC summit in Copenhagen and its successor in Doha in 2012 raised frustration among environmental NGOs, climate justice groups used the opportunities to socialize a new generation of activists (see de Moor and Wahlström 2019).

Although sectarianism and fragmentation have hampered international unity around environmental struggles, the increasing intensity of climate change as an existential threat has the potential to facilitate coordination and cooperation between progressive milieus, and to spur the reconstruction of a transnational movement of workers and peoples (Amin, 2018; Almeida, 2019). It is against this background that a new wave of protest for climate justice has developed around the globe, with the FFF strikes and mobilizations gaining momentum and representing a potentially historic turn in climate activism. Given the nature of their framing and organization, these developments prompted expectations of an increased capacity for climate activism to encompass heterogeneous groups. Hence, we will explore whether and to what extent there is a cross-class constituency behind the FFF upsurge (Hypothesis 1).

In social movement studies, research aimed at ‘bringing capitalism back in’ to the analysis of contentious politics has also pointed to the implications of the structural bases of protests on the forms, organization, and framing of movements (Hetland and Goodwin, 2013; della Porta, 2015; Giugni and Grasso, 2019). As mentioned above, a reliance on lobbying, organizational professionalization, and single-issue framing have all been seen as related to the growing prominence of a middle-class constituency in some forms of environmentalism. By the same token, the ‘environmentalism of the poor’ has more often been associated with disruptive forms of protest, grassroots organizing, and a frame that bridges environmental issues and social justice (Martinez-Alier, 2014).

In the specific case of the FFF protests, relevant questions are if and, if so, how social class impacts attitudes toward different approaches to addressing environmental issues and climate change. In this study, we considered four different categories of actors/institutions that strategies to combat climate change might focus on: *governments, modern science, companies and the market, and individuals’ lifestyle choices*. With respect to these approaches, FFF has been presented as a return to the targeting of political institutions as responsible for addressing the dramatic effects of climate change (de Moor *et al.*, 2021). It focused attention on the importance of putting pressure on national government – as symbolized by the, initially solitary, sit-in of Greta Thunberg in front of the Swedish parliament. The school strikers have been credited with expressing a utopian potential, appealing to ‘the young’ as the ‘voiceless future of the humanity’, ready to sacrifice part of their formal education in the present in the name of the future, and asking ‘governments to solve the crisis’ (McKnight, 2020).

The pressure directed at political institutions through protest has also been connected to a notable reliance on science and science-driven decision making. While research on the profile of environmental and climate activists has often identified a particularly prominent role for people involved in the socio-cultural professions among the middle class, recent analyses of the climate strike demonstrators have noted an increase in the presence of technical occupations (explained by the high proportion of students) in addition to a broader trust in science (Wennerhag and Hylmö, 2021).⁴ Trust in scientific knowledge has been relevant for the specific development of

⁴According to Magnus Wennerhag and Anders Hylmö (2021), students represented 48% of people in climate strike protests in 2019, an increase from just 19% in previous demonstrations. Indeed, the 2019 FFF mobilizations have often been referred to as ‘school strikes’ (ibid.).

FFF; to influence hostile or ineffective governments, activists explicitly appealed to science and emphasized the need to be ‘listening to scientists’ (Evensen, 2019; Fisher, 2019) to address the climate emergency, often forging alliances with critical experts.

The focus on political institutions alongside the reliance on science interacts with two other principal strategies that have been particularly relevant in the development of the climate movements: those oriented toward sensitizing economic actors and those calling for transformations in lifestyle (Hadden, 2015). Within the FFF milieu, these are reflected in calls for self-empowerment and for intervention in the economic domain. While some organizations believe in the possibility to influence business enterprise also at international level, countercultural streams of environmental activism counter with the importance of developing alternative lifestyles.

In sum, movement actors have used a variety of strategies to address both the climate threat and environmental issues more generally. The relationship between social class and the strategic choices of activists – one which has seldom been explored in the literature – appears to be important, given that some research has suggested that activists from lower social classes tend to have a stronger collective identification and level of commitment, greater ideological belief and a more left-wing orientation (Giugni and Grasso, 2019: 67–76). What needs to be disentangled is if and, if so, how are different strategic orientations within the movement for climate action meaningfully connected to activists’ social backgrounds? Specifically, we expect a lower/working-class background and identification – linked, as they are, to left-wing positioning, libertarian values, and political commitment – to have an effect on the core strategic choice of activists, reducing the focus on transforming companies and increasing confidence in political (rather than personal or market-centered) solutions (Hypothesis 2).

Surveying protesters in the Fridays for Future strikes

Crowd surveys represent a central method for answering fundamental questions about social movements and protest participation. According to Dana R. Fisher *et al.* (2019), as ‘we know that most people do not attend protests regularly, if at all, it is all the more important to understand the characteristics of people who do demonstrate’ in order to sketch an accurate picture of protests, their motivations and demands, recruitment processes, organizational settings, strategies, and aspirations. Employing the established technique of protest surveys, which was designed to sample respondents in moving crowds (van Aelst and Walgrave, 2001; van Stekeleburg *et al.*, 2012; Giugni and Grasso, 2019), a consortium of researchers from universities across Europe surveyed the largest demonstration in several cities under the FFF banner held, first, in March 2019 and, second, during the ‘Global Week for Future’ in September later that year (Wahlström *et al.*, 2019; de Moor *et al.*, 2020; Zamponi *et al.*, 2021). In the demonstrations, researchers and trained collaborators distributed ‘flyers with basic information about the survey and a QR-code, as well as a token taking the individual to an online survey’ (Wahlström *et al.*, 2019: 5–6). This survey could be filled out (only once) at any time during or in the 3 weeks following the event. In March 2019, we approached over 10,000 demonstrators in 13 European cities (across nine countries), receiving 1905 completed questionnaires (Wahlström *et al.*, 2019: 5). At the September 2019 event, we distributed over 13,000 flyers and received 3154 responses (de Moor *et al.*, 2020: 89).

Building on previous research endeavors, particularly the CCC project ‘Caught in the Act of Protest: Contextualizing Contention’ (see van Stekeleburg *et al.*, 2012; Walgrave and Verhulst, 2011; Walgrave *et al.*, 2016), researchers generated a probabilistic sample through systematic procedures to be used for each demonstration, ensuring data were representative (de Moor *et al.*, 2020: 8; Zamponi *et al.*, 2021). The presence of pointers (who selected demonstrators to-be-surveyed) and some face-to-face screener interviews on the spot contributed to data validity, and the use of identical questionnaires, protocols, and fact sheets made it possible to

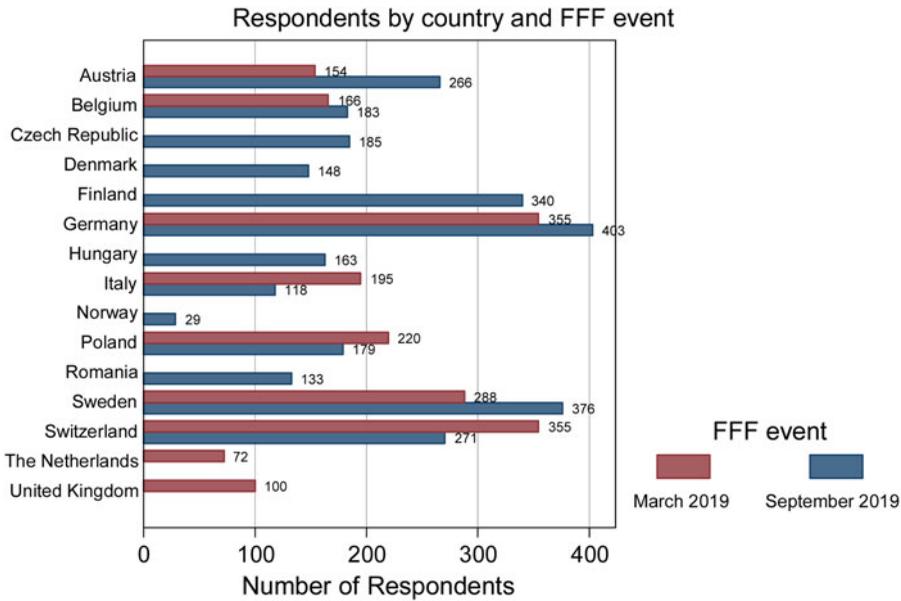


Figure 1. Distribution of sampled FFF participants per country and event date (March and September 2019). Source: Zamponi *et al.* (2021).

standardize empirical evidence (van Stekeleburg *et al.*, 2012: 256–260; Wahlström *et al.*, 2019; de Moor *et al.*, 2020; Zamponi *et al.*, 2021).

In this article, we include data from the European cities surveyed in either of the two protest events. Figure 1 summarizes the number of valid questionnaires returned by country for each round of fieldwork ($N_{\text{March}} = 1905$ and $N_{\text{Sept}} = 2794$ for a sample size that consists of 4699 FFF European protesters). There was a high level of variation in response rates across cities, ranging from 12% in Amsterdam to 30% in Stockholm at the March 2019 events, and from 12% in Florence to 34% in Helsinki in the September marches (Zamponi *et al.*, 2021). Previous research noted similar figures with respect to CCC protest survey data (Zamponi *et al.*, 2021; see Walgrave and Verhulst, 2011).

Social class and climate strike activists

Here we explore the class composition of FFF European protesters before, in the following section, analyzing how social class affects confidence in strategies to solve environmental problems/the climate threat. In this section, we examine four indicators to reveal social class belonging and identity. First, we measure subjective class self-placement through a categorical variable. The question asked was ‘people sometimes describe themselves as belonging to the working class, the middle class, or the upper or lower class. Would you describe yourself as belonging to the...?’. We coded responses as follows: 1 = Upper class; 2 = Upper-middle class; 3 = Lower-middle class; 4 = Working/Lower class; 5 = None/Don’t know. Measurements related to self-declared class identification encounter a significant problem: people tend to disproportionately identify as belonging to the middle class, even in countries where feelings of relative loss of social status have been widespread over recent years (Alonso *et al.*, 2015) – however, scholars have found that the proportion of individuals who identify themselves as the working class is notably higher than the percentage of individuals within this class in occupational terms (Giugni and Grasso, 2019: 67). In any case, there is often a lack of correspondence between subjective class identity and objective class position (Sosnaud *et al.*, 2013). These are not only distinct

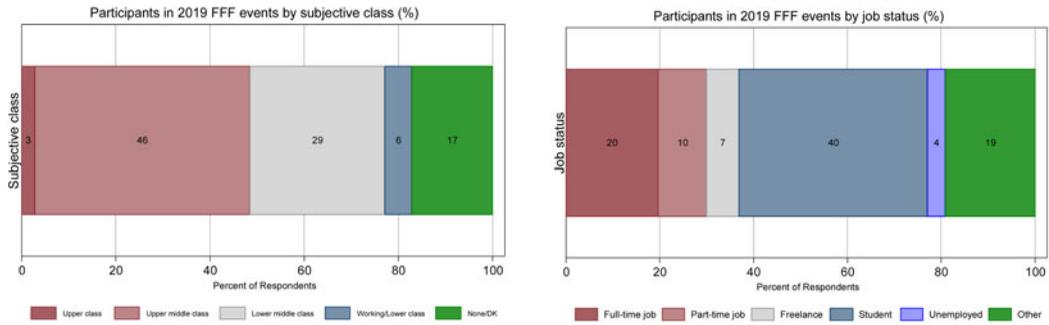


Figure 2. Participants in 2019 FFF events by subjective class and job status.

concepts, but each has the potential to influence social life (Sosnaud *et al.*, 2013). It is for that reason that we secondly asked respondents what was their employment situation (1 = Full-time job; 2 = Part-time job; 3 = Freelance; 4 = Unemployed/between jobs; 5 = Student; 6 = Other).⁵ Third, among respondents that are or were employed or freelance, we included a dummy variable asking whether in their ‘main job, [they do/did] have any responsibilities for supervising the work of other (or [their] own) employees’. Fourth, we created an ordinal variable that measured whether the parents of the respondent studied at university (0 = no, 1 = one parent, 2 = both parents).⁶

Figure 2 represents the distribution of participants in the 2019 events by subjective class identity and objective class position;⁷ the distribution of participants in FFF protests disaggregated by (a) supervising work of others and (b) the university education of parents can be found in Appendix Figure A1. In Appendix Figures A2–A3, we split participants by social class for each country. Note that only a small minority of FFF participants identify as belonging to the ‘upper class’ (3%) or ‘working/lower class’ (6%). In contrast, self-identification as ‘upper middle class’ is high (46%), as is ‘lower middle class’ (29%). A sizeable portion of respondents declared not to identify as belonging to any particular social class or as simply ‘don’t know’ (17%). Demonstrators across different countries varied on this question, with the UK in particular a clear outlier in terms of the social composition of FFF protests; 72% of respondents identified themselves as belonging to the ‘lower middle’ or ‘working/lower’ classes.

With respect to occupation, only 20% of the marchers had a full-time job, while 40% were students and 10% were in part-time employment. These figures also varied by country; at least 80% of respondents in the Dutch and Polish marches were students, which contrasts with Belgium and Norway, where only one in four FFF protesters were students. Unsurprisingly, the figures for subjective class identification and job status vary dramatically by age. While 76% of young respondents were students (with only 3% having a full-time job), 48% of adults participating in the FFF events were in full-time employment (and 9% were students).⁸

Studies on the class basis of protest events have identified some differences between marches organized by the labor movement and those organized by new social movements, despite a notable convergence on values and ideologies (Peterson *et al.*, 2015). Analyzing May Day and climate

⁵The ‘other’ category accommodates a variety of groups such as pensioners and housewives/househusbands. Multiple responses were allowed.

⁶We do not have information on household income and students are overrepresented among FFF participants, casting doubts on the validity of educational level as a proxy for social class. We contend, therefore, that parents’ educational level is a more suitable indicator for this purpose.

⁷The question on subjective class identification was not included in the Norwegian survey.

⁸We generated a dummy variable that distinguishes between ‘young’ respondents (aged 25 years old or younger) and ‘adult’ (at least 26 years old).

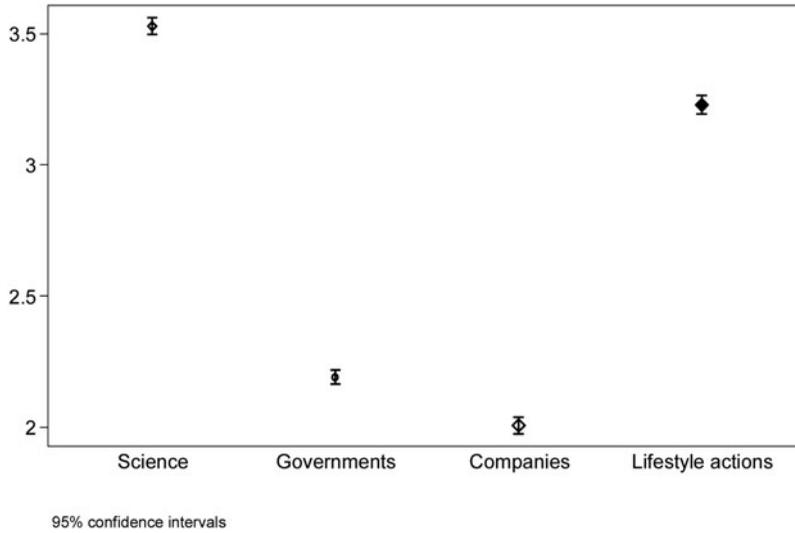


Figure 3. Average levels of trust in science, governments, companies and the market, and lifestyle actions to solve environmental problems/stop climate change among 2019 FFF protesters.

change demonstrations, Eggert and Giugni (2012) noted a homogenization of the class background of leftist protests – while workers de-aligned from the traditional left, they did not shift to the new left, thus blurring the line between old and new movements. As for the FFF socio-demographic background, research has already identified the large presence of a new generation among activists, as well as the overrepresentation of women and the significant participation of highly educated people (see Wahlström *et al.*, 2019; de Moor *et al.*, 2020). Indeed, about half of the European participants of the FFF Global Climate Strike in September 2019 were below 35 years old (de Moor *et al.*, 2020). With our comparative data on FFF protesters, two figures stand out: around 50% of respondents identify as belonging to working or lower middle classes and students do not represent a majority inside the movement milieus (Figure 2; Appendix Figures A1–A3). In sum, in contrast to the narratives that stress the prevalence of relatively well-off students as the core of the FFF constituency, the heterogeneity we find in terms of social background of protesters points to the need to build cross-class coalitions in order for a mass movement around climate justice to develop.

Social class and strategies to address the climate crisis

In addition to examining the social basis of protesters, this study also aims to shed light on how configurations of social class shape climate activists' support for different strategies to deal with climate. To address that question, we measured levels of protesters' agreement with strategies that put faith in science, companies, governments, and individual lifestyle choices, respectively, to address environmental problems/stop climate change. Attitudes toward each were measured on a five-point Likert scale, which ranged from *strong disagreement* = 1 to *strong agreement* = 5.⁹ Figure 3 details the average values of these four responses. Additionally, histograms disaggregated by country are detailed in the Appendix (Figures A4–A7). While the difference in answers

⁹The specific phrasing read as follows: 'Modern science can be relied on to solve our environmental problems', 'Governments can be relied on to solve our environmental problems', 'Companies and the market can be relied on to solve our environmental problems', and 'Stopping climate change must primarily be accomplished through voluntary lifestyle changes by individuals'.

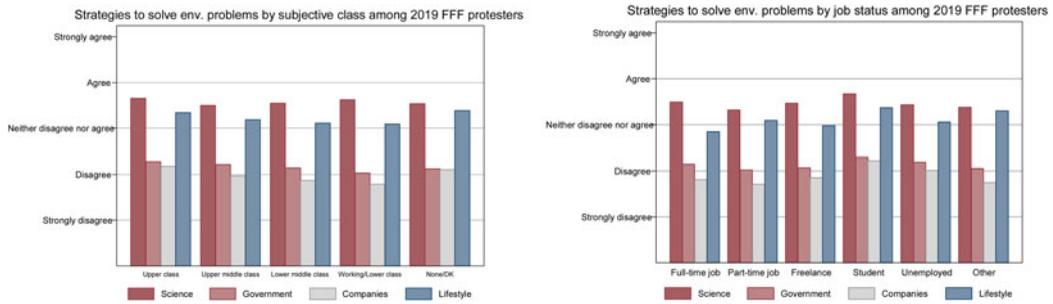


Figure 4. Strategic focus on actors/institutions to solve environmental problems/stop climate change by subjective class and job status among 2019 FFF protesters.

between different social classes is arguably small, in [Figure 4](#) we show that confidence in governments, companies and the market, and lifestyle changes to solve environmental problems/stop climate change is lower among lower and people working classes than other social classes. Agreement with a reliance on science is, by contrast, widespread across all subjective class groupings. Consistent with those findings, a reliance on the market and companies to address environmental problems appears to be higher among those whose parents had university education ([Appendix Figure A8](#)). In addition, people who reported their employment status as either ‘part-time’ or ‘other’ (retired people, househusbands/wives) were less trustful of companies and the market to tackle environmental issues ([Figure 4](#)). Instead, they reported greater belief in the possibility of fighting climate change through lifestyle actions.

We further explored the association between class and attitudes toward different actors and institutions with respect to solving environmental issues/stopping climate change through (multivariate) linear regression models. We first created a set of descriptive statistics with the variables used throughout ([Appendix Table A1](#)). Second, we fitted several OLS regression models, treating subjective class as an ordinal indicator in models 1–4 ([Appendix Table A2](#)).¹⁰ In models 5–8 ([Appendix Tables A2 and A3](#)) and models 1–4 ([Appendix Table A4](#)), we instead used job status, responsibility over other workers, and parents’ university education as the main predictors. In models 5–8 ([Appendix Tables A4 and A5](#)), we also controlled for age group,¹¹ gender,¹² round of fieldwork in the FFF protest,¹³ and left-right ideology.¹⁴ In all models, we controlled for city fixed effects ([Appendix Table A2](#)).¹⁵

Although the impact of social class is arguably not large, we observe some asymmetric effects on attitudes toward different strategies to meet environmental challenges. While ‘responsibility over the work of others’ is associated with lower confidence in governments and companies and the market to solve environmental problems, it is linked with increased confidence in voluntary lifestyle choices to stop climate change. Having university-educated parents is also associated with a lower reliance on companies. Model 5 ([Appendix Table A2](#)) shows that, relative to people in full-time employment, students reported a greater – part-time workers and other categories reported a lower – reliance on science to solve our environmental problems, but these effects

¹⁰See [Appendix Figures A9–A10](#).

¹¹1 = under 15 years old; 2 = 15–19 years old; 3 = 20–35 years old; 4 = 36–65 years old; or 5 = older than 65 years old.

¹²1 = female; 0 = male. We included an ‘other (specify if wanted)’ category. While the number of observations falling in this category is arguably not insignificant in ordinary terms ($n = 72$), its size nonetheless renders its statistical operationalization problematic.

¹³0 = March 2019; 1 = November 2019.

¹⁴This category is measured through a self-placement 11-point scale, where 0 means Left and 10 means Right.

¹⁵These effects account for the specific characteristics (e.g., institutional, historical, cultural) of each city that might be correlated with FFF activists’ confidence in different strategies to cope with the environmental threat. As a robustness check, we used country fixed effects, but our results did not change in any substantial way – not reported here.

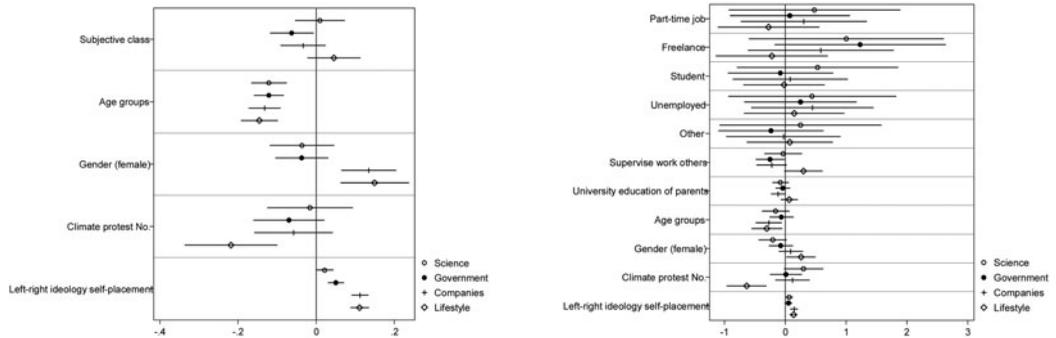


Figure 5. Impact of subjective class on trusted strategies to solve environmental problems, multivariate linear regression with robust standard errors (models 5–8, Appendix Table A4 and models 1–4, Appendix Table A5).

Note: City dummies are included in the regressions but are not plotted here. 95% confidence intervals. Coefficients are log odds.

were not robust (see Appendix Figure A12). Asymmetric effects were, however, relevant with respect to class self-identification. According to marginal effects reported in Appendix Figure A11, those FFF protesters who saw themselves as belonging to lower social strata reported relying on governments, companies and the market, and lifestyle changes to solve environmental issues to a lesser degree than other protesters. With respect to science, by contrast, they did not report a lower confidence. Specifically, a one-unit change in the four-point subjective class scale (ranging from upper class to working/lower class) decreased reliance on governments to solve environmental problems (measured on a 1–5 Likert scale) by 0.08 units (see model 6, Appendix Table A4 and Figure A11).

In summary, empirical support for our hypotheses is mixed. While there seems to be strong support for the class heterogeneity of FFF constituencies (H. 1), the impact of activists' social background on their reliance on different strategies should be nuanced (H. 2). On the one hand, in line with our hypothesis, upper class people and those who supervise the work of others tend to rely to a greater extent on governments to fight the environmental threat. At the same time, however, job status and parents' level of education do not play a role. Relative to upper class respondents, working class FFF activists tend to rely less on companies/the market and lifestyle actions to counter the climate emergency. Overall, empirical evidence for our second hypothesis is weak and inconclusive.

The control variables in our analysis also yielded some interesting results. We know from existing research that generational variables are important determinants of attitudes toward environment and climate change, with concern regarding those issues particularly strong among young people (Uba *et al.*, 2021). In our study, age was strongly and negatively correlated with confidence in any of the four strategies: that is, younger cohorts reported less confidence than older protesters in all of science, governments, companies and the market, and lifestyle choices to tackle environmental issues (Figure 5), although that effect was not robust in some model specifications. At the same time, activists who reported political values further to the Right tended to report more confidence in science, governments, and especially in companies/markets and lifestyle choices to address the environmental threat. In addition, gender and the surveyed FFF event had asymmetric impacts (Figure 5). With respect to the two protest events, participants in the September 2019 marches reported much less confidence in voluntary lifestyle choices than participants in the March 2019 event. The differences between participants at the two marches were not significant with respect to companies and the market, governments, or science. Women, meanwhile, reported believing to a greater extent than men that lifestyle changes and companies and the market can be relied upon to address climate change – however, this effect is not robust.

Conclusion

The contributions of this article are twofold. On the one hand, our empirical results challenge the idea that, in Europe at least, the FFF marches are predominantly populated by ‘rich kids’. Rather, despite some cross-national differences, we noted that about half of the surveyed activists self-identified as lower/working or lower-middle classes. We also noted that those with full-time positions in the labor market accounted for less than one-third of protesters, with the rest of the marchers made up of not only a sizeable group of students, but also professionals in part-time positions. Protesters included people with responsibility over other workers and those without, and protesters whose parents did attain a university degree alongside people whose parents did not. In short, our evidence suggests a strong heterogeneity and a forging of alliances across social classes were important elements of how FFF unfolded. On the other hand, the social background seems to impact FFF activists’ reliance on different strategies, as lower/working class activists are less trustful of companies/markets and individual lifestyle choices to cope with environmental challenges and stop climate change – yet, we have stressed throughout that empirical evidence is not very robust.

Further research is necessary to understand the extent to which the ideological fragmentation of FFF (de Cabanes, 2019; Kokkonen, 2020) could, in the future, be addressed by the diversity of its social basis, particularly in the context of the emergence of voices critical of ‘the whiteness of the green’ (McKnight, 2020). Radical and focused on justice, the FFF campaign has been said to lack both specific claims and allies, relying on highly emotional language – based on fear of catastrophe – and hope in technological development (Pellizzoni, 2019). The broadening of the participation of lower classes as the principal victims of climate change has the potential, however, to transform blurred ideological connotations through the perspective of an ‘environmentalism of the poor’ (Martinez-Alier, 2014).¹⁶ The calls for ‘system changes not climate change’ emerged as being supported principally by women, non-white people, and people with lower incomes and lower levels of education (Todd Beer, 2020). Indeed, the understanding of attitudes to climate change as a generational cleavage – defined by ‘you grown-ups’ destroying ‘our future’ – seems increasingly to be contested by (or at least connected to) protests against violence, racism, and inequality that are led not just by young people but also by women, indigenous, and racialized people as the main victims of climate change (Bowman, 2020). Such calls are made in defense of both the environment and justice (Uncu, 2020), and in the name of ‘people’s power’ (Taylor *et al.*, 2019).

Therefore, it remains to be seen to what extent FFF will successfully navigate a variety of pressing challenges, not only in terms of global warming and natural disasters but also with respect to interactions with institutional politics, cooptation attempts, and the need to accommodate internal heterogeneity in light of critical events such as the 26th UN Climate Change Conference of the Parties. What the FFF mobilization effort has shown, however, is that building frames linking capitalism and the global environmental crisis, along with organizational efforts that appeal to disadvantaged and marginalized milieus, are important elements for the success of inclusive and cross-cutting mass climate movements.

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¹⁶Research by *Quantité Critique* (2019) suggested that in France the school strikers were overwhelmingly left-wing (44% left and 29% very left); in the 2017 presidential election, 41% voted Mélenchon of La France Insoumise and 24% the socialist Hamon. Support for the ‘Yellow Vests’ was also high among strikers (de Cabanes, 2019), with widespread demand for radical anti-capitalist changes (Marquardt, 2020) – indeed, 82% of school strikers desired an exit from capitalism (*Quantité Critique*, 2019).

Data. Currently under embargo, the dataset of the FFF protest surveys will be made available through a repository in the coming months. Replication files are available upon request.

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References

- Almeida P (2019) Climate justice and sustained transnational mobilization. *Globalizations* 16, 973–979.
- Alonso LE, Rodríguez CJF and Rojo RI (2015) From consumerism to guilt: economic crisis and discourses about consumption in Spain. *Journal of Consumer Culture* 15, 66–85.
- Amin S (2018) It is imperative to reconstruct the Internationale of workers and peoples. International Development Economic Associates (IDEAs), 3rd July 2018. Available at <http://www.networkideas.org/featured-articles/2018/07/it-is-imperative-to-reconstruct-the-internationale-of-workers-and-peoples/>.
- Asara V (2020) Untangling the radical imaginaries of the Indignados' movement: commons, autonomy and ecogism. *Environmental Politics*, <https://doi.org/10.1080/09644016.2020.1773176>.
- Bertuzzi N (2019) Political Generations and the Italian Environmental Movement(s): Innovative Youth Activism and the Permanence of Collective Actors. *American Behavioral Scientist* 63, 1556–1577.
- Bob C (2001) Marketing rebellion: insurgent groups, international media, and NGO support. *International Politics* 38, 311–334.
- Bowman B (2020) Fridays for Future: how the young climate movement has grown since Greta Thunberg's lone protest. *The Conversation*, 28 August 2020. Available at <https://theconversation.com/fridays-for-future-how-the-young-climate-movement-has-grown-since-greta-thunbergs-lone-protest-144781>.
- Chase-Dunn C and Reese, E (2007) The World Social Forum: A global party in the making? In Sehm-Patomaki K and Ulvila M (eds), *Global Political Parties*. London: Zed Press, pp. 53–92.
- Chase-Dunn C and Almeida P (2020) *Global Struggles and Social Change. From Prehistory to World Revolution in the Twenty-First Century*. Baltimore: Johns Hopkins University Press.
- Cotgrove S and Duff A (1980) Environmentalism, middle-class activism and politics. *The Sociological Review* 28, 333–51.
- Cotgrove S and Duff A (1981) Environmentalism, values, and social change. *British Journal of Sociology* 32, 92–110.
- de Cabanes A (2019) Ces trois 'Jeunesses' qui se mobilisent pour le climat. *The Conversation*, 14 March 2019. Available at <https://theconversation.com/ces-trois-jeunesses-qui-se-mobilisent-pour-le-climat-113297>.
- della Porta D (2015) *Social Movements in Times of Austerity: Bringing Capitalism back into Protest Analysis*. Oxford: Polity Press.
- della Porta D and Diani M (2020) *Social Movements: An Introduction*, 3rd Edn. Oxford: Blackwell Publishing.
- della Porta D and Piazza G (2007) Local contention, global framing: the protest campaigns against the TAV in Val Di Susa and the bridge on the Messina Straits. *Environmental Politics* 16, 864–882.
- della Porta D and Portos M (2020) Social movements in times of inequalities: struggling against austerity in Europe. *Structural Change and Economic Dynamics* 53, 116–126.
- della Porta D and Portos M (2021) A bourgeois story? The class basis of Catalan independentism. *Territory, Politics, Governance* 9, 391–411.
- della Porta D and Portos M (2022) Political participation in a globalized world. In Giugni MG and Grasso M (eds), *The Oxford Handbook of Political Participation*. Oxford: Oxford University Press.
- della Porta D, Parks L and Portos M (2022) Environmentalism in Europe: Activism and Advocacy. In Rayner T, Szulecki K, Jordan A and Oberthür S (eds), *Handbook on European Union Climate Change Policy and Politics*. Cheltenham: Edward Elgar Pub.
- de Moor J and Wahlström M (2019) Narrating political opportunities: explaining strategic adaptation in the climate movement. *Theory & Society* 48, 419–451.
- de Moor J, Uba K, Wahlström M, Wennerhag M and de Vydt M (eds) (2020) Protest for a future II: composition, mobilization and motives of the participants in Fridays For Future climate protests on 20–27 September, 2019, in 19 cities around the world. Available at https://osf.io/asruw/?fbclid=IwAR0N0uOHF_qV1KGY_2W0lJ2r3tXRCrzClAQ6K9_kRaphmsjzVraHvRrT_es (accessed 27 March 2020).
- De Moor J, de Vydt M, Uba K and Wahlström, M (2021) New kids on the block: taking stock of the recent cycle of climate activism. *Social Movement Studies* 20, 619–625.
- Dennison J (2017) *The Greens in British Politics Protest, Anti-Austerity and the Divided Left*. Basingstoke: Palgrave Macmillan, Pivot.

- Diani M** (2005) Cities in the world: local civil society and global issues in Britain. In della Porta D and Tarrow SG (eds), *Transnational Protest and Global Activism*. Lanham, MD: Rowman & Littlefield, pp. 45–67.
- Dolezal M** (2010) Exploring the stabilization of a political force: the social and attitudinal basis of green parties in the age of globalization. *West European Politics* 33, 534–552.
- Dryzek JS** (2013) *The Politics of the Earth: Environmental Discourses*, 3rd Edn. Oxford: Oxford University Press.
- Dryzek JS, Norgaard RB and Schlosberg D** (2011) Climate change and society: approaches and responses. In Dryzek JS, Norgaard RB and Schlosberg D (eds), *The Oxford Handbook of Climate Change and Society*. Oxford: Oxford University Press.
- Dunlap RE and York R** (2008) The globalization of environmental concern and the limits of the post-materialist explanation: evidence from four cross-national surveys. *Sociological Quarterly* 49, 529–563.
- Eggert N and Giugni MG** (2012) Homogenizing ‘old’ and ‘new’ social movements: a comparison of participants in May day and climate change demonstrations. *Mobilization: An International Quarterly* 17, 335–348.
- Eggert N and Giugni MG** (2015) Does the class cleavage still matter? The social composition of participants in demonstrations addressing redistributive and cultural issues in three countries. *International Sociology* 30, 21–38.
- Elliott E, Seldon BJ and Regens JL** (1997) ‘Political and economic determinants of individuals’ support for environmental spending. *Journal of Environmental Management* 51, 15–27.
- Evensen D** (2019) The rhetorical limitations of the #FridaysForFuture movement. *Nature Climate Change* 9, 428–430.
- Fisher DR** (2019) The broader importance of #FridaysForFuture. *Nature Climate Change* 9, 430–431.
- Fisher DR, Andrews KT, Caren N, Chenoweth E, Heaney MT, Leung T, Nathan Perkins L and Pressman J** (2019) The science of contemporary street protest: new efforts in the United States. *Science Advances* 5. doi: 10.1126/sciadv.aaw5461
- Giugni MG and Grasso M** (2015) Environmental movements in advanced industrial democracies: heterogeneity, transformation, and institutionalization. *Annual Review of Environment and Resources* 40, 337–61.
- Giugni MG and Grasso M** (2019) *Street Citizens: Protest Politics and Social Movement Activism in the Age of Globalization*. Cambridge: Cambridge University Press.
- Hadden J** (2015) *Networks in Contention. The Divisive Politics of Climate Change*. Cambridge: Cambridge University Press.
- Harring N, Jagers SC and Martinsson J** (2011) Explaining ups and downs in the public’s environmental concern in Sweden: the effects of ecological modernization, the economy, and the media. *Organization & Environment* 24, 388–403.
- Hetland G and Goodwin J** (2013) The strange disappearance of capitalism from social movement studies. In Barker C, Cox L, Krinski J and Nilsen AG (eds), *Marxism and Social Movements*. Leiden: Brill, pp. 83–102.
- Hutter S** (2014) *Protesting Culture and Economics in Western Europe: New Cleavages in Left and Right Politics*. Minneapolis, MN: University of Minnesota Press.
- Inglehart R and Catterberg G** (2002) Trends in political action: the developmental trend and the post-honeymoon decline. *International Journal of Comparative Sociology* 43, 300–316.
- Kim SY and Wolinsky-Nahmias Y** (2014) Cross-national public opinion on climate change: the effects of affluence and vulnerability. *Global Environmental Politics* 14, 79–106.
- Kokkonen SLM** (2020) *Teenagers’ guide to climate crisis: climate policy and action frames of German Fridays for Future activists* (MA thesis). Central European University. Available at http://www.etd.ceu.edu/2020/kokkonen_sunna.pdf.
- Kriesi H** (1989) New social movements and the new class in the Netherlands. *American Journal of Sociology* 94, 1078–1116.
- Lewis GB, Palm R and Feng B** (2019) Cross-national variation in determinants of climate change concern. *Environmental Politics* 28, 793–821.
- Marquardt J** (2020) Fridays for Future’s disruptive potential: an inconvenient youth between moderate and radical ideas. *Frontiers in Communication*, <https://doi.org/10.3389/fcomm.2020.00048>.
- Martinez-Alier J** (2014) The environmentalism of the poor. *Geoforum; Journal of Physical, Human, and Regional Geosciences* 54, 239–241.
- Martinez-Alier J, Anguelovski I, Bond P, Del Bene D, Demaria F, Gerber J-F, Grey I, Haas W, Healy H, Marin-Burgos V, Ojo G, Porto M, Rijnhout L, Rodríguez-Labajos B, Spangenberg J, Temper L, Warlenius R and Yáñez I** (2014) Between activism and science: grassroots concepts for sustainability coined by Environmental Justice Organizations. *Journal of Political Ecology* 21, 19–60.
- Martinez-Alier J, Temper L, Del Bene D and Scheidel A** (2016) Is there a global environmental justice movement? *The Journal of Peasant Studies* 43, 731–755.
- McKnight H** (2020) The oceans are rising and so are we: exploring utopian discourses in the school strike for climate movement. *Brief Encounters* 4, 48–63.
- Melucci A** (1996) *Challenging Codes*. Cambridge/New York: Cambridge University Press.
- Pellizzoni L** (2019) Climate crisis and new ecological mobilisations (part I and II). *Undisciplined Environments*, 8 November 2019. Available at <https://undisciplinedenvironments.org/2019/11/08/climate-crisis-and-new-ecological-mobilisations-part-i/>.
- Peterson A, Wahlström M and Wennerhag M** (2015) European anti-austerity protests – beyond ‘old’ and ‘new’ social movements? *Acta Sociologica* 58, 293–310.
- Poguntke T** (1993) *Alternative Politics: The German Green Party*. Edinburgh: Edinburgh University Press.

- Quantité Critique**. 2019. Qui manifeste pour le climat? Des sociologues répondent. Reporterre, 26 January 2019. Available at <https://reporterre.net/Qui-manifeste-pour-le-climat-Des-sociologues-repondent>.
- Rootes C** (ed). (2003) *Environmental Protest in Western Europe*. Oxford: Oxford University Press.
- Rootes C** (2005) A limited transnationalization? The British environmental movement. In Della Porta D and Tarrow SG (eds), *Transnational Protest and Global Activism*. Lanham, MD: Rowman & Littlefield, pp. 21–43.
- Rootes C and Brulle R** (2013) Environmental movements. In Snow DA, Della Porta D, Klandermans B and McAdam D (eds). *The Wiley-Blackwell Encyclopedia of Social and Political Movements*. Malden: Wiley-Blackwell Pub, pp. 1–7. <https://doi.org/10.1002/9780470674871.wbespm464>
- Sosnaud B, Brady D and Frenk SM** (2013) Class in name only: subjective class identity, objective class position, and vote choice in American presidential elections. *Social Problems* **60**, 81–99.
- Taylor M, Watts J and Bartlett J** (2019) Climate crisis: 6 million people join latest wave of global protests. *The Guardian*, 27 September 2019. Available at <https://www.theguardian.com/environment/2019/sep/27/climate-crisis-6-million-people-join-latest-wave-of-worldwide-protests>.
- Todd Beer C** (2020) ‘Systems change not climate change’: support for a radical shift away from capitalism at mainstream U.S. climate change protest events. *The Sociological Quarterly*. doi: 10.1080/00380253.2020.1842141
- Togami C and Staggengborg S** (2019) New hope for climate activism. *Mobilizing Ideas*, 15 March 2019. Available at <https://mobilizingideas.wordpress.com/2019/03/15/new-hope-for-climate-activism/> (accessed 15 July 2020).
- Touraine A, Hegedus Z, Dubet F and Wiewiorka M** (1983) *Anti-nuclear Protest: The Opposition to Nuclear Power in France*. Cambridge: Cambridge University Press.
- Tramel S** (2018) Convergence as political strategy: social justice movements, natural resources and climate change. *Third World Quarterly* **39**, 1290–1307.
- Uba K, Lavizzari A and Portos M** (2021) Experience of economic hardship and right-wing political orientation hinder climate concern among European young adults, Unpublished Manuscript.
- Uncu BA** (2020) In defense of both climate and justice: the climate justice movement. TESEV Briefs 2020/10. Available at https://www.tesev.org.tr/wp-content/uploads/report_In-Defense-of-both-Climate-and-Justice.pdf.
- van Aelst P and Walgrave S** (2001) Who is that (wo)man in the street? From the normalisation of protest to the normalisation of the protester. *European Journal of Political Research* **39**, 461–486.
- van Stekelenburg J, Walgrave S, Klandermans B and Verhulst J** (2012) Contextualizing contestation: framework, design, and data. *Mobilization: An International Quarterly* **17**, 249–262.
- Wahlström M, Kocyba P, de Vydt M and de Moor J** (eds) (2019) Protest for a future: composition, mobilization and motives of the participants in Fridays For Future climate protests on 15 March 2019 in 13 European cities. Available at <https://gup.ub.gu.se/publication/283193> (accessed 27 March 2020).
- Walgrave S and Verhulst J** (2011) Selection and response bias in protest surveys. *Mobilization: An International Quarterly* **16**, 203–222.
- Walgrave S, Wouters R and Ketelaars P** (2016) Response problems in the protest survey design: evidence from fifty-one protest events in seven countries. *Mobilization: An International Quarterly* **21**, 83–104.
- Wennerhag M and Hylmö A** (2021) Social class and environmental movements. In Grasso M and Giugni M (eds), *The Routledge Handbook of Environmental Movements*. London: Routledge.
- Zamponi L, Baukloh AC, Bertuzzi N, Chironi D, della Porta D and Portos M** (2021) (Water) bottles and (street) barricades: the politicization of lifestyle-centred action in youth climate strike participation. *Journal of Youth Studies*, forthcoming.

Appendix

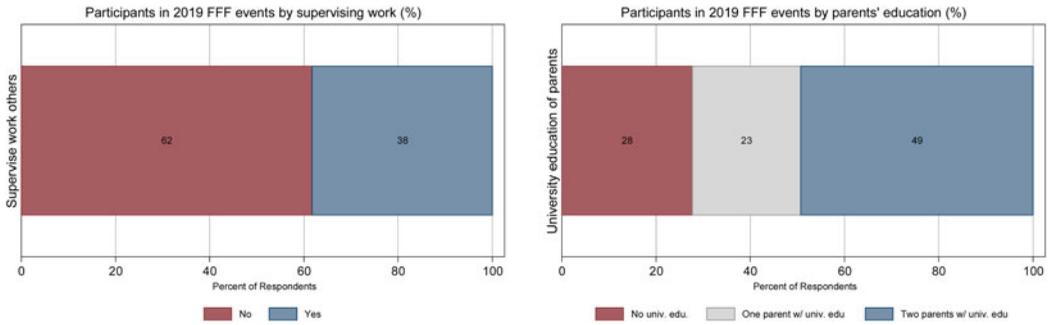


Figure A1. Participants in 2019 FFF events disaggregated by supervising the work of others and university education of parents.

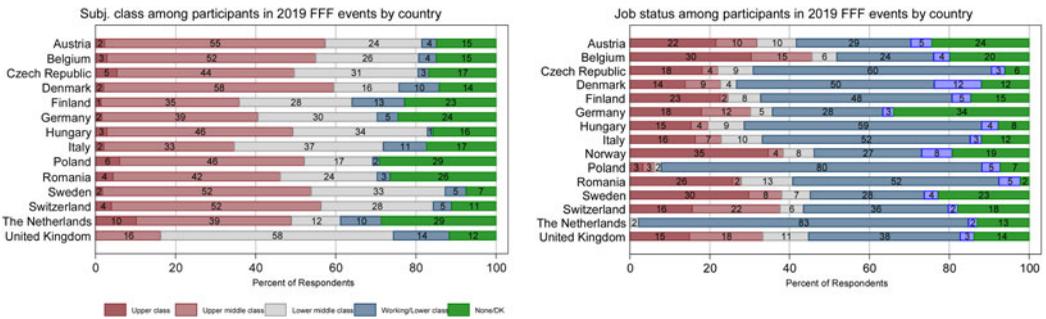


Figure A2. Participants in 2019 FFF events disaggregated by subjective class and job status per country.

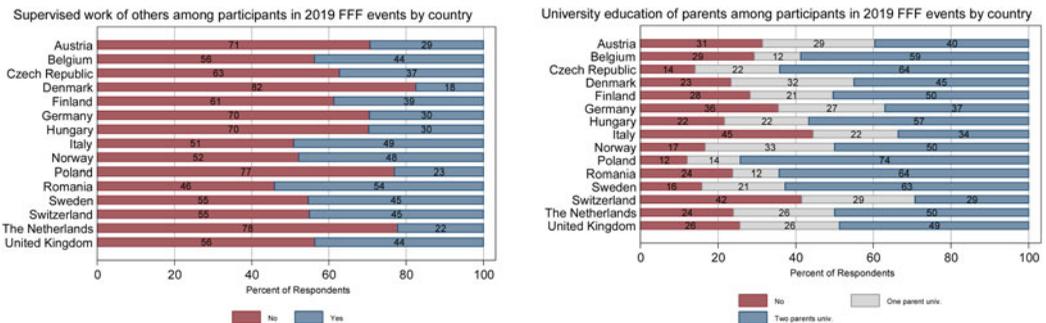


Figure A3. Participants in 2019 FFF events disaggregated by supervising the work of others and university education of parents per country.

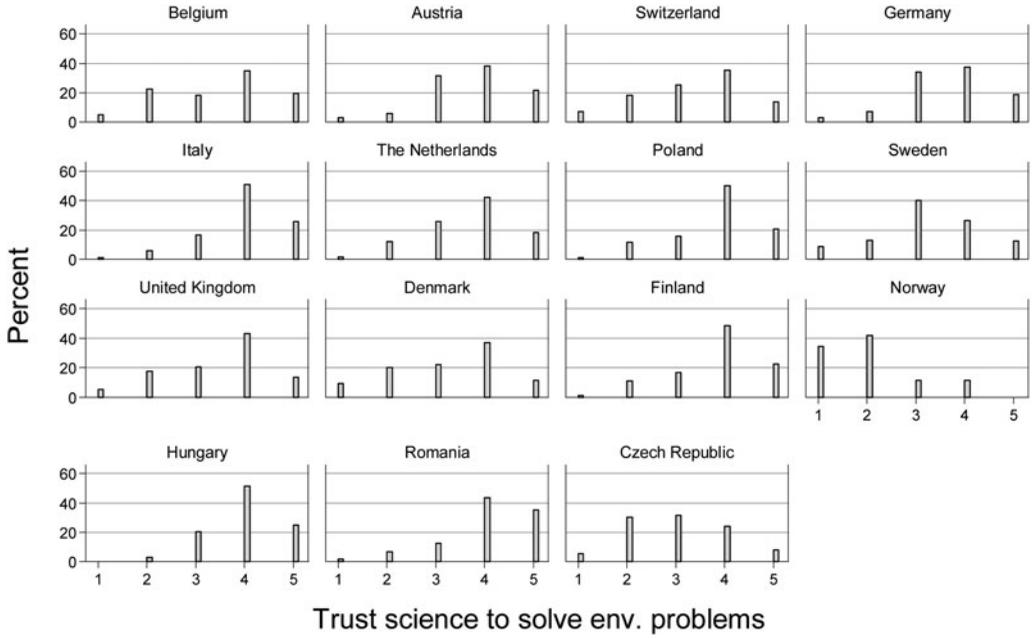


Figure A4. Histogram of trust in science to solve environmental problems (1 = strongly disagree; 5 = strongly agree) by country.

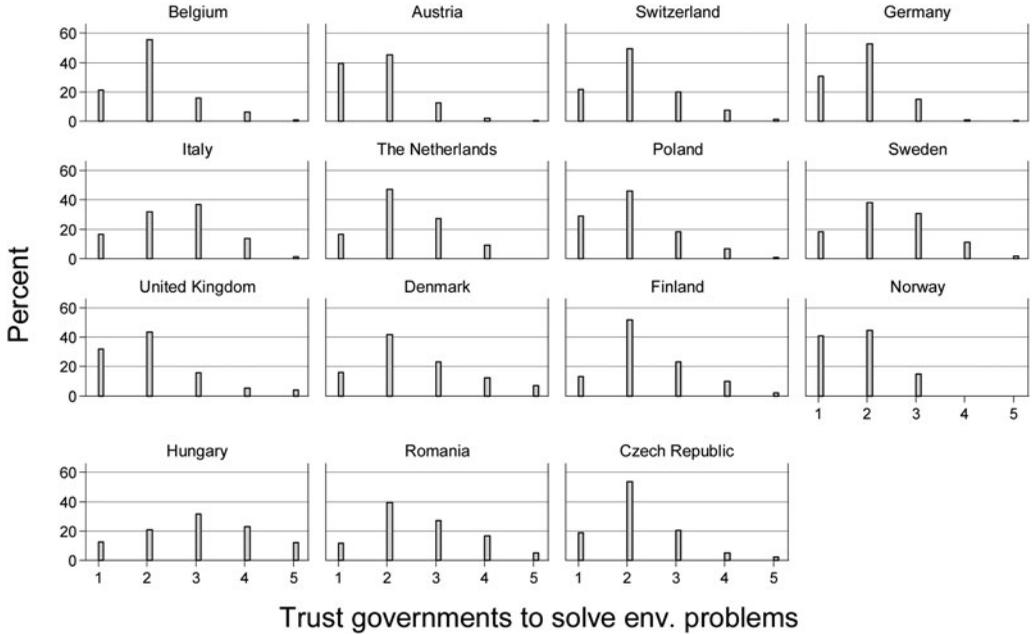


Figure A5. Histogram of trust in governments to solve environmental problems (1 = strongly disagree; 5 = strongly agree) by country.

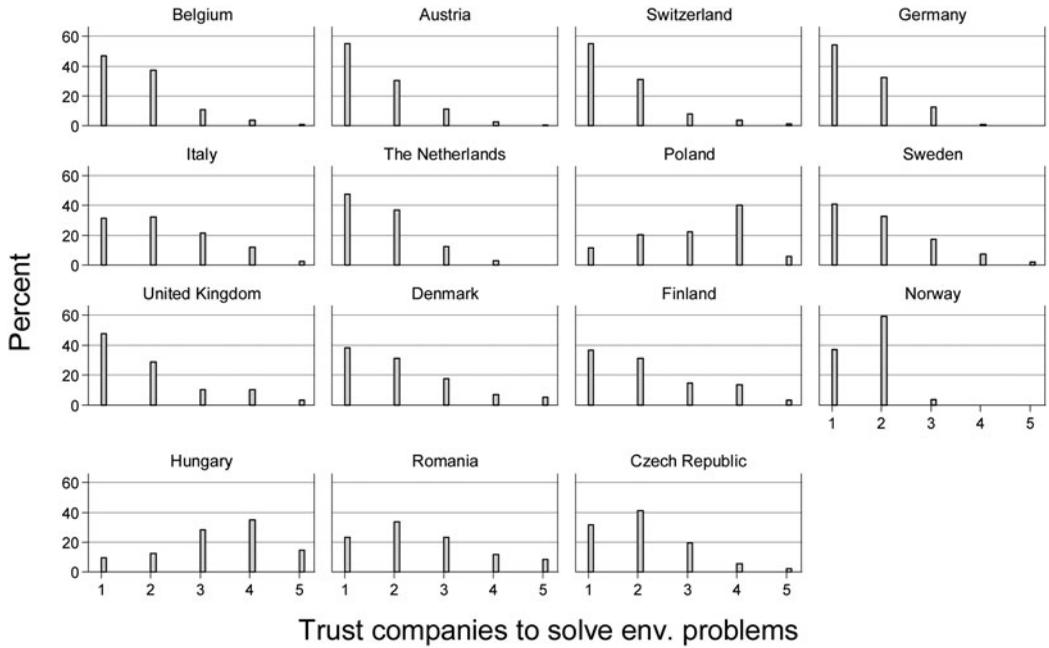


Figure A6. Histogram of trust in companies to solve environmental problems (1 = strongly disagree; 5 = strongly agree) by country.

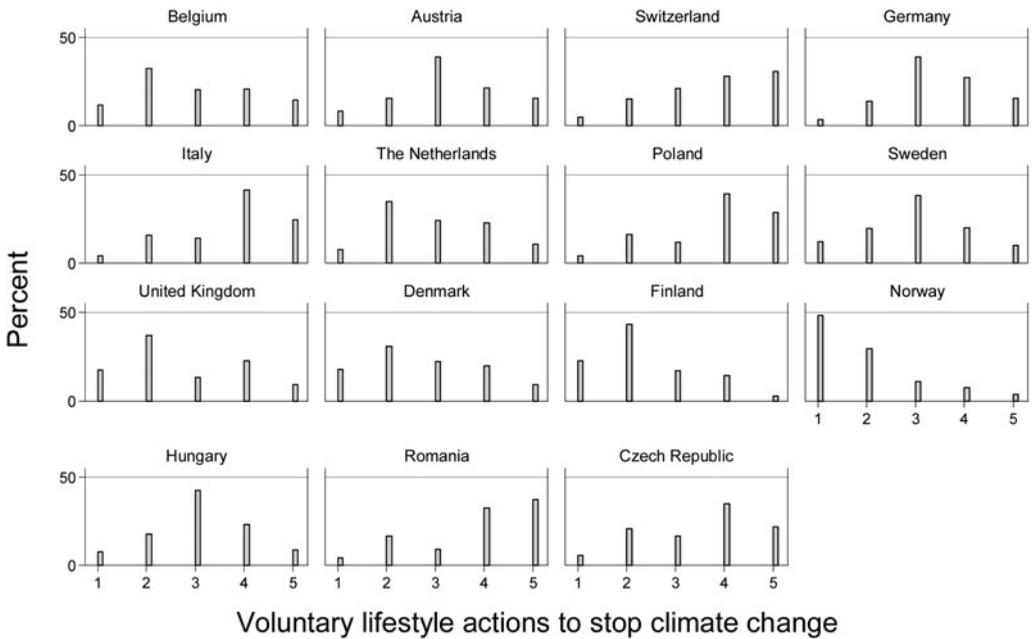


Figure A7. Histogram of voluntary lifestyle actions to stop climate change (1 = strongly disagree; 5 = strongly agree) by country.

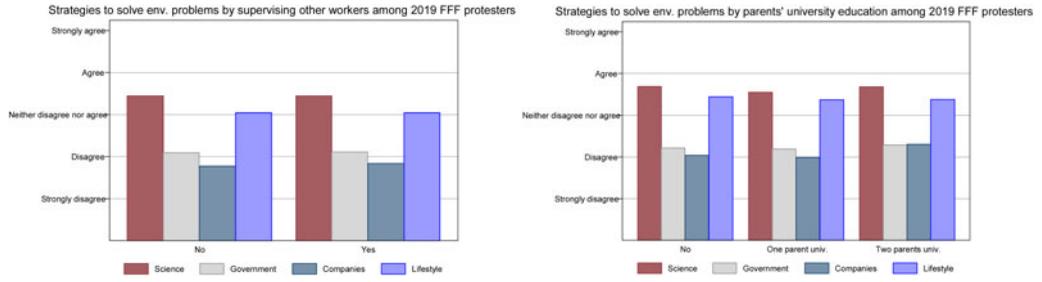


Figure A8. Trust among 2019 FFF protesters in actors/institutions to solve environmental problems disaggregated by supervising the work of others (left) and university education of parents (right).

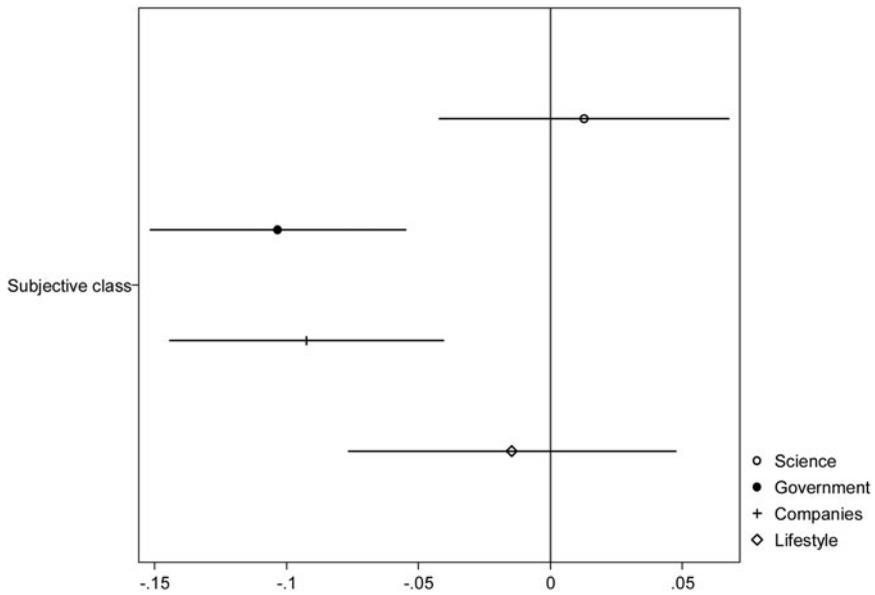


Figure A9. Impact of subjective class on trust in actors/institutions to solve environmental problems/stop climate change, OLS regression with robust standard errors – models 1–4, [Table A2](#).

Note: City dummies are included in the regressions but are not plotted here. 95% CI coefficients are log odds.

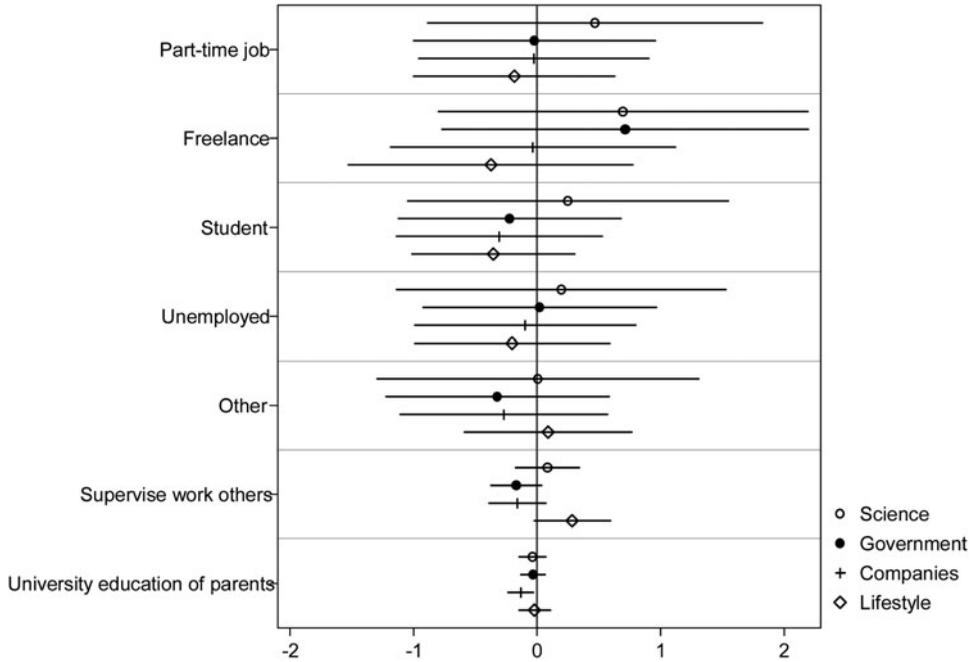


Figure A10. Impact of job status, supervising the work of others and parents’ university education on trust in actors/institutions to solve environmental problems/stop climate change, OLS regression with robust standard errors – models 1–4, [Table A4](#).
 Note: City dummies are included in the regressions but are not plotted here. 95% CI coefficients are log odds.

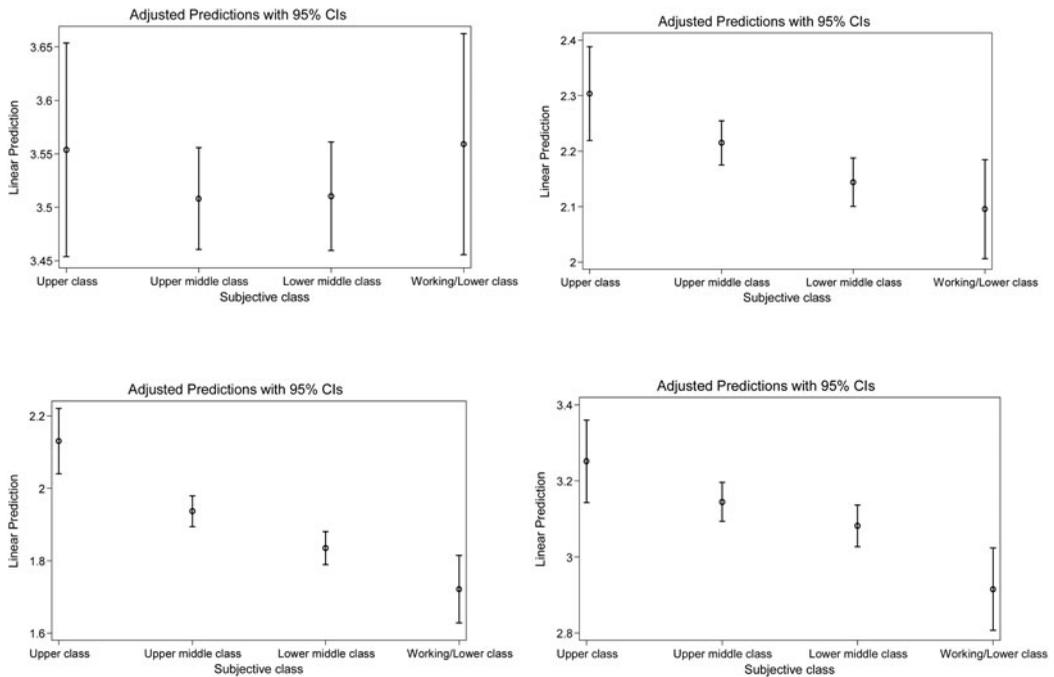


Figure A11. Marginal effects of subjective class on trust in science (upper left), governments (upper right), companies and the market (lower left), and lifestyle changes (lower right) to solve environmental problems/stop climate change, OLS regression with robust standard errors – models 5–8, [Table A4](#).

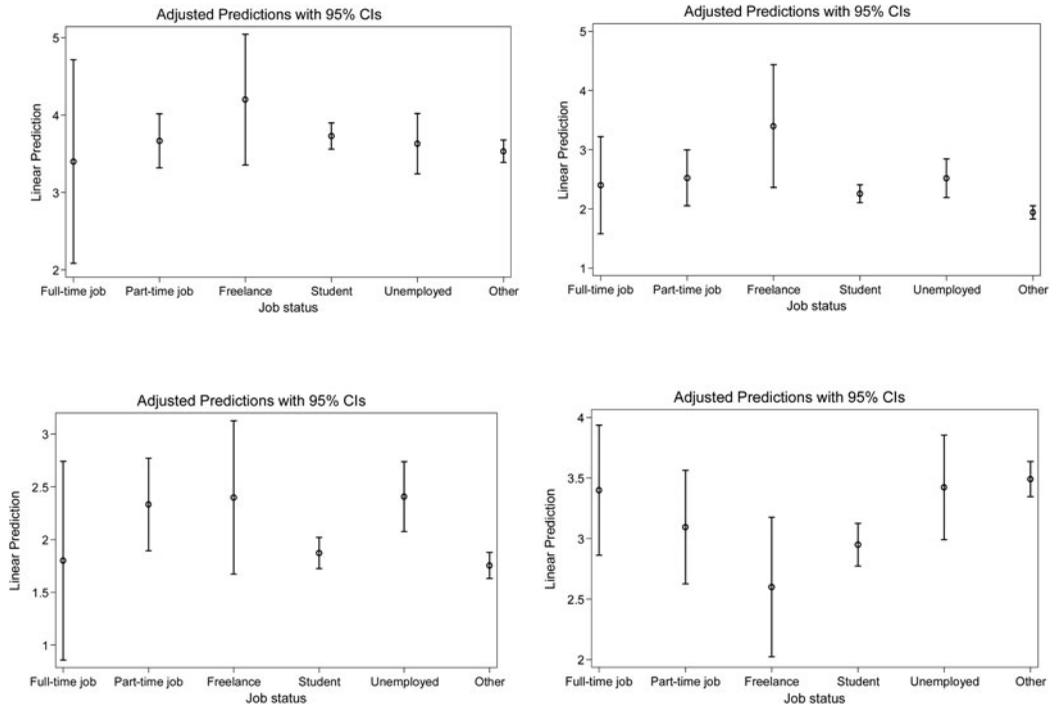


Figure A12. Marginal effects of job status on trust in science (upper left), government (upper right), companies and the market (lower left), and lifestyle actions (lower right) to solve environmental problems/stop climate change, OLS regression with robust standard errors – models 1–4, [Table A5](#).

Table A1. Descriptive statistics

	Mean	S.D.	N	Min.	Max.
Trust science	3.53	1.06	4509	0	1
Trust governments	2.19	0.94	4506	0	1
Trust companies	2.01	1.09	4508	0	1
Trust lifestyle actions	3.23	1.21	4511	0	1
Subjective class	2.45	0.67	3281	1	4
I_Part-time job	0.10	0.30	3971	0	1
I_Freelance	0.07	0.25	3971	0	1
I_Student	0.40	0.49	3971	0	1
I_Unemployed	0.04	0.19	3971	0	1
I_Other	0.19	0.39	3971	0	1
Supervise work others	0.38	0.49	2489	0	1
Parents' university education	1.22	0.85	1853	0	2
Climate protest no.	0.59	0.48	4699	0	1
Age groups	2.98	0.99	4699	1	5
Gender (female)	0.59	0.49	3957	0	1
Left-right ideology	2.56	1.90	3292	0	10

Table A2. Determinants of trust in different ways of solving environmental problems, OLS regressions with robust standard errors

	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6		Model 7		Model 8	
	Coeff.	S.E.	Coeff.	S.E.	Coeff.	S.E.	Coeff.	S.E.	Coeff.	S.E.	Coeff.	S.E.	Coeff.	S.E.	Coeff.	S.E.
Subjective class	0.01	0.03	-0.10***	0.02	-0.09**	0.03	-0.01	0.03								
Job status (ref. full-time job)																
I_Part-time job									-0.15*	0.06	-0.06	0.05	0.00	0.05	0.08	0.07
I_Freelance									-0.06	0.08	-0.09	0.06	-0.01	0.07	0.06	0.08
I_Student									0.14**	0.05	0.14***	0.04	0.20***	0.04	0.40***	0.05
I_Unemployed									-0.06	0.09	0.06	0.09	0.10	0.09	0.20*	0.10
I_Others									-0.12*	0.05	-0.00	0.04	0.01	0.05	0.37***	0.06
Constant	3.37***	0.10	2.34***	0.08	1.96***	0.08	2.93***	0.11	3.42***	0.07	2.07***	0.05	1.67***	0.05	2.74***	0.08
R ²	0.0789		0.1021		0.1815		0.1346		0.1019		0.1109		0.2093		0.1596	
City dummies	Yes		Yes		Yes		Yes		Yes		Yes		Yes		Yes	
N	3268		3268		3271		3270		3959		3954		3958		3959	

Note: $P < 0.10$, * $P < 0.05$, ** $P < 0.01$, *** $P < 0.001$. DVs: reliance on science/governments/companies and the market to solve environmental problems (models 1 and 5/2 and 6/3 and 7) and voluntary lifestyle changes to stop climate change (models 4 and 8). Coefficients are log odds.

Table A3. Determinants of strategies to solve environmental problems/stop climate change, OLS regressions with robust standard errors

	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6		Model 7		Model 8	
	Coeff.	S.E.														
Supervise work others parents' university education	0.02	0.04	-0.04	0.04	0.06	0.04	0.01	0.05	0.01	0.03	0.03	0.03	0.01	0.03	-0.01	0.03
Constant	3.28***	0.08	2.13***	0.05	1.67***	0.05	2.81***	0.08	3.75***	0.03	2.04***	0.10	1.84***	0.11	3.29***	0.15
R^2	0.1131		0.0927		0.1122		0.1228		0.0595		0.1382		0.2564		0.1587	
City dummies	Yes															
N	2480		2479		2479		2482		1847		1846		1849		1847	

Note: $P < 0.10$, $*P < 0.05$, $**P < 0.01$, $***P < 0.001$. DVs: reliance on science/governments/companies and the market to solve environmental problems (models 1 and 5/2 and 6/3 and 7) and voluntary lifestyle changes to stop climate change (models 4 and 8). Coefficients are log odds.

Table A4. Determinants of strategies to solve environmental problems/stop climate change, OLS regressions with robust standard errors

	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6		Model 7		Model 8	
	Coeff.	S.E.	Coeff.	S.E.	Coeff.	S.E.	Coeff.	S.E.	Coeff.	S.E.	Coeff.	S.E.	Coeff.	S.E.	Coeff.	S.E.
Subjective class									0.01	0.03	-0.06*	0.03	0.04	0.03	0.05	0.03
Job status (ref. full-time job)																
I_Part-time job	0.47	0.69	0.02	0.50	0.03	0.47	-0.19	0.41								
I_Freelance	0.70	0.76	0.71	0.75	0.03	0.59	-0.38	0.59								
I_Student	0.25	0.66	0.22	0.46	0.31	0.42	-0.36	0.33								
I_Unemployed	0.20	0.68	0.02	0.48	0.10	0.45	-0.20	0.40								
I_Others	0.01	0.66	0.32	0.46	0.27	0.43	0.09	0.34								
Supervise work others	0.08	0.13	0.17	0.10	0.16	0.12	0.28°	0.16								
Parents university education	-0.04	0.05	0.03	0.05	0.13*	0.05	-0.02	0.06								
Climate protest No.									-0.02	0.06	-0.07	0.05	-0.06	0.06	-0.22***	0.06
Age groups									-0.12***	0.02	-0.12***	0.02	-0.13***	0.02	-0.15***	0.02
Gender (female)									-0.04	0.04	-0.04	0.03	0.13***	0.04	0.15**	0.04
Left-right ideology									0.02*	0.01	0.05***	0.01	0.11***	0.01	0.11***	0.01
Constant	3.06***	0.81	2.65***	0.60	2.34***	0.52	2.71***	0.44	3.78***	0.14	2.64***	0.12	1.67***	0.05	3.05***	0.15
R ²	0.1068		0.1966		0.2541		0.1811		0.0904		0.1223		0.2263		0.1922	
City dummies	Yes		Yes		Yes		Yes		Yes		Yes		Yes		Yes	
N	459		460		460		459		2732		2734		2733		2733	

Note: °P<0.10, *P<0.05, **P<0.01, ***P<0.001. DVs: reliance on science/governments/companies and the market to solve environmental problems (models 1 and 5/2 and 6/3 and 7) and voluntary lifestyle changes to stop climate change (models 4 and 8). Coefficients are log odds.

Table A5. Determinants of strategies to solve environmental problems/stop climate change, OLS regressions with robust standard errors

	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6		Model 7		Model 8	
	Coeff.	S.E.	Coeff.	S.E.	Coeff.	S.E.	Coeff.	S.E.	Coeff.	S.E.	Coeff.	S.E.	Coeff.	S.E.	Coeff.	S.E.
Subjective class									0.02	0.11	-0.06*	0.03	-0.03	0.03	0.05	0.03
Job status (ref. full-time job)																
I_Part-time job	0.48	0.71	0.08	0.50	0.31	0.52	-0.28	0.42	-0.20**	0.08	-0.08	0.06	-0.10	0.06	0.05	0.08
I_Freelance	1.01	0.81	1.23°	0.71	0.59	0.61	-0.22	0.47	-0.07	0.09	-0.08	0.07	0.04	0.08	0.12	0.09
I_Student	0.53	0.67	-0.08	0.44	0.08	0.48	-0.02	0.34	0.07	0.06	0.02	0.05	-0.02	0.06	0.22**	0.07
I_Unemployed	0.44	0.70	0.25	0.47	0.45	0.51	0.15	0.42	-0.16	0.11	0.03	0.10	0.10	0.10	0.28*	0.12
I_Others	0.25	0.67	-0.23	0.44	-0.03	0.48	0.07	0.36	-0.14	0.07	-0.04	0.05	-0.03	0.05	0.25***	0.07
Supervise work others	-0.03	0.16	-0.25*	0.12	-0.22°	0.12	0.30°	0.16								
Parents' university education	-0.08	0.06	-0.04	0.06	-0.12*	0.06	0.07	0.07								
Climate protest no.	0.30°	0.16	0.01	0.13	0.12	0.14	-0.64***	0.16	-0.02	0.06	-0.08	0.05	-0.07	0.15	-0.20**	0.06
Age groups	-0.16	0.11	-0.06	0.10	-0.27*	0.11	-0.30*	0.13	-0.07*	0.03	-0.11***	0.02	-0.13***	0.11	-0.11***	0.03
Gender (female)	-0.21°	0.11	-0.07	0.10	0.09	0.10	0.26*	0.12	-0.02	0.04	-0.03	0.03	0.14***	0.10	0.14**	0.04
Left-right ideology	0.06*	0.03	0.05°	0.03	0.15***	0.03	0.14***	0.03	0.02	0.01	0.05***	0.01	0.11***	0.03	0.12***	0.01
Constant	3.18**	0.91	2.44***	0.63	2.42**	0.70	3.40***	0.53	3.67***	0.18	2.63***	0.15	2.31**	0.67	2.62***	0.18
R ²	0.1345		0.2409		0.3329		0.3087		0.0969		0.1231		0.2296		0.1969	
City dummies	Yes		Yes		Yes		Yes		Yes		Yes		Yes		Yes	
N	369		370		370		369		2695		2696		2695		2695	

Note: ° $P < 0.10$, * $P < 0.05$, ** $P < 0.01$, *** $P < 0.001$. DVs: reliance on science/governments/companies to solve environmental problems (models 1 and 5/2 and 6/3 and 7) and voluntary lifestyle changes to stop climate change (models 4 and 8). Coefficients are log odds.