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ORIGINAL ARTICLE

Relative deprivation and inequalities in social and political activism

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Abstract In this paper we analyse whether relative deprivation has divergent effects on different types of social and political action. We expect that it will depress volunteering with parties as well as different types of conventional political participation more generally while stimulating volunteering with anti-cuts organisations and engagement in various kinds of protest activism. There is little research into how relative deprivation impacts on different types of social and political action from the wide range of activities available to citizens in contemporary democracies as well as into how this relationship might vary based on the wider economic context. While many studies construct scales, we examine participation in specific activities and associations, such as parties or anti-cuts organisations, voting, contacting, demonstrating and striking to show that deprivation has divergent effects that depart from what is traditionally argued. We apply random effects models with cross-level interactions utilizing an original cross-national European dataset collected in 2015 ($N = 17{,}667$) within a collaborative funded-project. We show that a negative economic context has a mobilizing effect by both increasing the stimulating effect of relative deprivation on protest activism as well as by closing or reversing the gap between resource-poor and resource-rich groups for volunteering with parties and voting.

Keywords Relative deprivation · Political activism · Inequalities · Political action · Political participation · Protest

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Introduction

In this paper, we analyse whether relative deprivation has divergent effects on different types of social and political action. We expect that it will depress volunteering with parties as well as different types of conventional political participation more generally while stimulating volunteering with anti-cuts organisations and engagement in various kinds of protest activism. There is little research into how relative deprivation impacts on different types of social and political action from the wide range of activities available to citizens in contemporary democracies as well as into how this relationship might vary based on the wider economic context (see for e.g. Grasso and Giugni 2016; Kern et al. 2015). Negative economic contexts could be understood to stimulate political action, and particularly protest (Giugni and Grasso 2015a, 2016; Grasso and Giugni 2016). Indeed, grievance-based accounts of participation have traditionally linked relative deprivation with anti-systemic action (Buechler 2004). Moreover, negative economic conditions could be seen to deepen existent inequalities in political voice (Evans and Tilley 2017).

In order to investigate these important questions for democratic societies, we apply random effects models with cross-level interactions utilising an original cross-national European dataset collected in 2015 ($N = 17{,}667$) within a collaborative funded-project. We contribute to the literature by showing that a negative economic context has a mobilising effect by both increasing the stimulating effect of relative deprivation on protest activism as well as by closing or reversing the gap between resource-poor and resource-rich groups for volunteering with parties and voting.

The rest of the paper is structured as follows: First, we look at previous literature on relative deprivation and political participation and draw out our hypotheses. Next we detail our data and methods. After that, we develop our random effects models, testing how relative deprivation impacts on participation in different repertoires as well as the extent to which this is mediated by economic context. The models also allow to test whether inequalities in participation deepen in times of crisis for a wide range of political actions. We conclude the paper by drawing out the implications of our results for the wider literature and future research on this topic.

Previous research

As Van Deth (2014) notes, citizens' participation is 'the elixir of life' of democracy. Since civic engagement and political participation provide the bedrock for the very functioning of democracy, they have been a long-standing concern of political scientists. As Hay (2007) points out, the conclusions on the health of democracy tend to be drawn on the basis of definitions of participation with scholars holding more fluid understandings of participation normally arguing that the nature of participation is simply changing but not necessarily deteriorating.

Voting and participation in traditional representative agencies such as political parties and trade unions has been the focus of a first group of studies on political participation more specifically (Verba et al. 1978; Berger 1982). This type of

participation allows for feeding the political interests of citizens back into the processes of policy-making. Since Edmund Burke, elected representatives have been understood to translate the interests of their constituents in their deliberations and voting strategies in Parliament.

Later, in the 1960s and 70s, new forms of participation such as demonstrations, occupations, picket-lines and wild-cat strikes started becoming increasingly popular and linked to the emergence of 'new' social movements such as the environmental movement (Giugni and Grasso 2015b). A second group of scholars came to focus on these 'unconventional' or 'extra-institutional' modes of action (Barnes and Kaase 1979; Inglehart 1977). These types of participation did not rely on political representatives whether in Parliament, political parties or trade unions, but relied on individuals' own, immediate participation in political acts of defiance. Traditionally, unconventional types of political action were the preserve of the working classes and other marginalised groups that did not have the vote (Lipsky 1968). For example, the youth revolts of '68 occurred at a time where the voting age was still 21. More generally, it is theorised that these extra-institutional types of participation are practiced in scenarios where the more conventional modes of participation have been shown to be insufficient or seem ineffective and inadequate for obtaining given political objectives.

Most recently, drawing on Tocqueville, other scholars have focused on social participation within organisations in civil society and linking such types of participation to the idea of political culture within the wider community (Almond and Verba 1963; Eckstein 1961). In particular, the literature on social capital (Bourdieu 1983; Coleman 1990; Putnam 1993, 1995, 2000) focuses on this latter aspect more specifically and looks at the frequency of social contact and community involvement, including for political ends, in the forms of social participation e.g. joining or volunteering within associations. At the heart of most understandings of social participation is membership in voluntary associations and volunteering within them (Curtis et al. 2001). To count as social participation, they must involve face-to-face interaction from which reciprocity and trust then flow; they should engage members in collective endeavours for a common cause so that capacities for collective action are nurtured (Hall 1999). The underlying thinking in this school of thought is above all that civic engagement is important for democracy.

Given participation's centrality for democratic practice, it should not come as a surprise that falling and unequal levels of political engagement are major concerns for political scientists (Hall 1999). The literature has documented the decline of civic engagement and political participation in the United States (Putnam 1995, 2000; Pharr and Putnam 2000; Skocpol 2003). In Western Europe, more recent generations appear to be less participatory than older ones in both conventional and unconventional participation (Grasso 2014, 2016). The evidence is more mixed for social participation (Hall 1999). Given the importance of participation for democracy, it is crucial, particularly in the current context of economic crisis, to investigate how relative deprivation impacts on participation. The recent economic crisis led to growing unemployment and shrinking economic growth across Europe and the rest of the world (De Grauwe and Ji 2013). Almost 10 years on, in some countries, such as Greece and Spain, unemployment is still at

very high levels. These developments are likely to exacerbate the impact of relative deprivation on different types of political actions. As such, this study aims to investigate the impact of relative deprivation for different types of participation. This study also aims to analyse whether a negative economic context exacerbates the effect of relative deprivation for stimulating or inhibiting different types of participation as well as whether it widens existent inequalities in political action.

Considering the implications of economic adversity on repertoires of participation suggests that the effect may well vary between domains and that there will be differences in the effects of subjective feelings of relative deprivation, economic context, and resources. In our analysis of the effect of crisis on participation and inequalities, we examine relative deprivation, popularised within the context of grievance theories of collective action (Gurr 1970). Feelings of relative deprivation arise when one compares one's current living standards with some other situation—either one's in the past, or one's expectation of where one should have been at present, or a picture of justice and injustice, etc. The idea that satisfaction and deprivation are relative to the available comparisons that one has were originally developed by Merton (1957) and particularly Stouffer et al. (1949) in their work on the *American Soldier*. This idea helped them to make sense of the puzzle from their results that the military police were more satisfied with slow promotions than Air Corpsmen were with their rapid promotions. Relative deprivation became an important concept in social science because it clearly showed that social judgement is based not only in absolute standards but also in relative comparisons (Smith and Pettigrew 2015; Pettigrew 2016; Walker and Pettigrew 1984; Smith et al. 2012).

As Pettigrew (2016) notes, relative deprivation is an important concept because it challenges conventional wisdom about the importance of absolute deprivation. Davis (1959) further developed a mathematical model of relative deprivation. Runciman (1966) distinguished between relative deprivation based on personal comparisons (egoistic deprivation) and relative deprivation based on group comparisons (fraternalistic deprivation). In particular, Pettigrew (2016) has criticised Gurr's (1970) *Why Men Rebel* study on the basis that it falls into the ecological fallacy since relative deprivation is a phenomenon of individuals not societies and therefore micro-level phenomena cannot be assumed from macro-level findings. Pettigrew (2016) further emphasises how the central thrust of relative deprivation is that individual responses are often different from those that are expected of the macro category. For example, while macro-level high unemployment might spur protest participation, unemployed individuals may be less likely to engage in protest activism. Foster and Matheson (1995) further showed that when group experience becomes relevant for one's personal experience protest increases so individuals who are deprived and also belong to particularly resource-poor groups should be particularly likely to protest. Suddenly imposed grievances refer to an unexpected threat or inroad upon people's rights or circumstances such as for example deteriorating economic conditions during crisis (Walsh 1981).

While grievance theories suggest that relative deprivation should spur protest activism, the classic Marienthal study showed how widespread unemployment depressed the once-vibrant civic life of an industrial village in Austria (Jahoda et al. 1933). Widespread unemployment affected the whole community so that the

citizens of Marienthal became less likely to attend voluntary organisations, clubs and public buildings such as the free library; the study showed that their social relations also deteriorated. This type of study suggests that deprivation should depress conventional participation in particular. Moreover, these results suggest that further austerity budget cuts, removing community safety nets and funding for social service initiatives, are likely to create less, not more, self-reliant citizens, particularly in the current economic context.

Putnam (2000), too, in his famous study also showed that civic associations in the United States declined sharply during the Great Depression. However, we now live in different times and the current economic crisis was not as deep. We might also wonder whether citizens in European societies in the late 00s with higher standards of living and where citizens are by and large insulated—even amongst the most resource-poor groups—by the most pernicious economic consequences through various social safety nets would suffer as much as US citizens in the late 1920s (Lim and Laurence 2015). A more recent study with data from the America's Barometer showed that there was a significant decline in social trust between 2006 and 2010 and that negative evaluations of personal and national economic situations were associated with a lower level of trust (Zizumbo-Colunga et al. 2010). Lim and Laurence (2015) found that volunteering declined in the current crisis in the UK and US. Hall (1999) had also suggested that the decline in trust in the UK in the early 1980s was probably linked to economic insecurity, experiences of unemployment and pessimism for the economy emerging from the 1980 to 1982 crisis. However, it could also be held that participation in social movement organisations (SMO) linked to protest activism and against austerity cuts might rise, by the same logic that we expect unconventional participation to be spurred as a result of deprivation and the development of grievances in times of crisis.

It is notable in particular that the current economic crisis has brought with it high levels of unemployment particularly in Southern European countries. Moreover, the literature shows that unemployed people will be less likely to become involved in volunteering activities since they are morally discouraged and decrease their social activities more generally (Feather 1989; Strauss 2008). However, some unemployed people can be more resource rich and prefer unemployment to what they perceive as inadequate job opportunities (Dunn et al. 2014). The literature has also shown that while unemployed people might be more 'biographically available' (McAdam 1986), their lower density networks mean that they are less likely to be asked to volunteer and thus mobilised to participation than those who are employed (Schussman and Soule 2005; Saunders et al. 2012). As such, the question remains open as to whether unemployed people suffer from lower volunteering and social participation to those in employment and to what extent. During economic crises, people might feel more financially insecure and thus spend more hours on the job to ensure that they do not become unemployed (Lim and Laurence 2015). This would be particularly true of those in manual occupations, as such we would expect to see inequalities in social activism by social class. Moreover, research has traditionally shown an important effect of resources on participation (Brady et al. 1995; Verba et al. 1995). As such, we would expect to see class-based inequalities in participation (Grasso 2018). Other than by employment status and occupational

class, we expect to see inequalities by education. Education has historically been shown to be a particularly important resource for all types of participation (Grasso 2013).

While seemingly straightforward, grievance theories were challenged in the 1970s by scholars arguing that while grievances were ubiquitous, most people did not participate, as such other factors must clearly be more important in terms of explaining why some people participate, whereas others do not. Resources (McCarthy and Zald 1977), such as political interest, and other skills, such as those emphasised in the civic voluntarism model (Verba et al. 1995), as well as wider political opportunities (McAdam 1982) were suggested as possible answers. Another prominent factor emphasised was efficacy, or the expectation that group-level problems could be effectively solved through participation in collective action. In a similar vein to the idea of agency capable of affecting structure, efficacy is understood as the individual's expectation that it is possible to alter conditions or policies through protest (Gamson 1992). Political efficacy is further subdivided into two dimensions—internal efficacy—the extent to which someone believes to understand politics and therefore participates in politics; and external efficacy—citizens' faith and trust in government (Van Stekelenburg and Klandermans 2013). Other than efficacy and political interest mentioned earlier, the political engagement model emphasised also the importance of leftist and libertarian social and political values for protest participation in particular (Schussman and Soule 2005). Sharing political values allows for the interpretation of the messages that social movements disseminate through information, a process known as framing (Benford and Snow 2000; Snow 2004).

Moreover, social embeddedness has traditionally been understood as fundamental for stimulating participation. Klandermans et al. (2008) for example showed how immigrants who felt efficacious were more likely to protest if they were also embedded in social networks, especially ethnic networks, offering the opportunity to discuss and learn about politics. Networks provide space to develop narratives of dissent in criticising the opposition (Paxton 2002). Moreover, being integrated in a network increases the chances that one will be targeted for mobilisation (Klandermans and Oegema 1987). Memberships provide links and networks made of acquaintances that are already active within social movements are more likely to draw one into political action (Klandermans 1997). Moreover, networks are communication channels for the diffusion of information, and they also allow the development of shared collective narratives (Gamson 1992). Additionally, the literature has shown that age impacts on participation—depressing conventional action and spurring protest participation and that women are generally more politically marginalised (Verba et al. 1997). When testing our hypotheses below, we will be controlling also for the other relevant factors for participation discussed.

To further summarise the discussion above in terms of the expected effects, we draw out the following hypotheses to guide our analysis:

H_1 Feelings of relative deprivation decrease the chances that someone will engage in conventional participation (volunteering with political parties, voting, contacting politicians).

H_2 Feelings of relative deprivation increase the chances that someone will engage in unconventional participation (volunteering with anti-cuts organisations, demonstrating, and striking).

H_3 Resource-poor groups (manual workers, unemployed, low education) are less likely to engage in conventional political participation.

H_4 Resource-poor groups (manual workers, unemployed, low education) are more likely to engage in unconventional political participation.

H_5 A negative economic context depresses conventional participation.

H_6 A negative economic context stimulates unconventional participation.

H_7 A negative economic context increases the negative effect of feelings of relative deprivation for inhibiting conventional participation.

H_8 A negative economic context increases the positive effect of feelings of relative deprivation for stimulating unconventional participation.

H_9 A negative economic context increases the negative effect of belonging to a resource-poor group for inhibiting conventional participation.

H_{10} A negative economic context increases the positive effect of belonging to a resource-poor group for stimulating unconventional participation.

Data and methods

In order to test our hypotheses, we rely on data from an original cross-national survey ($N = 18{,}370$) conducted in 2015 in the context of the Living with Hard Times (LIVEWHAT) [grant agreement number 613237] project funded by the European Commission under the auspices of their 7th Framework Programme. The survey was conducted in each of the nine European countries included in the project: France, Germany, Greece, Italy, Poland, Spain, Sweden, Switzerland and the UK by a specialised polling agency (YouGov) using online panels with the methodologies available in each country and quota balanced in order to match national population statistics in terms of region, sex, age and education level. The total final sample consisted of 17,667 individuals once missing cases were deleted. This allows us to compare across models with different dependent variables as the sample is the same.

For our dependent variables measures, we followed the classic literature (Verba et al. 1995; Pattie et al. 2004) as well as the outline and examples presented in Van Deth (2014) and constructed them as follows. For conventional participation, we included dummy variables for volunteering with political parties, voting at the last national election and contacting a politician. For unconventional participation, we included dummies for volunteering with an anti-cuts organisation, demonstrating and striking. In this way, our analysis allows us to disentangle whether the effect of

relative deprivation is different for social and political participation in conventional and unconventional repertoires and also types of organisations.

The independent variables are operationalised as follows: The key independent variable for relative deprivation is measured with a question asking respondents whether they felt that their household economic conditions had deteriorated in the last 5 years, to allow for the time-ordering necessary for causality. We dichotomise this measure following previous research (Rüdig and Karyotis 2013) in a dummy for whether individuals felt the economic situation of their household had become worse. Moreover, to look at inequalities, we created dummy variables for those with lower education levels (less than secondary school); those in manual occupations; and those that were currently unemployed. Following the literature discussed on the various determinants of political participation, we also control for a number of other key variables operationalised as follows: age (a continuous variable), gender (a dummy variable for male gender), political interest (a dummy variable for interest), internal and external political efficacy (both scales, the sign for external efficacy is reversed as the statements were all negative), left–right and libertarian–authoritarian values (both scales of five items) and organisational membership (number of organisations of which one is a member 0–12).

We also include a macro-level independent variable. To account for economic context, we include a measure for unemployment levels at the aggregate level as the key measure of negative economic performance in times of crisis due to its visibility and the negative implications for citizens. This allows us to test for H_5–H_6 as well as, with cross-level interactions, for H_7–H_{10}. All variable descriptive statistics are presented in Table 1. Table 2 presents variable distributions by country.

Our modelling strategy is described as follows. Our dependent variables are measured at the individual level. However, our respondents are nested in their respective countries. Thus, we specify multi-level models with random intercept coefficients to take into account the two-level nature of the data (country and individual). This type of model is useful to correct for the within-country dependence of observations (intraclass correlation) and adjusts both within and between parameter estimates in relation to the clustered nature of the data. Since we use dependent variables that are dichotomous, we estimate logistic multi-level models with a Gaussian link function.

Results

Table 3 presents the results from multi-level models that allow us to examine the evidence for and against the hypotheses presented in our theoretical section. First however, we turn to quickly examining the effects of the controls. In Table 3, Models 1–6, we can see that confirming previous results in the literature on participation, older people tend to be more likely to become involved in conventional activities (voting and contacting), whereas young people are more likely to become involved in unconventional activities (demonstrating and striking, and volunteering with anti-cuts organisations). Men are more likely than women to engage in both conventional activities and both kinds of volunteering (with political

Table 1 Variable descriptive statistics

	Mean	SD	Min	Max
Voted at last national election	0.79408	0.40438	0	1
Contacted a politician	0.13353	0.34015	0	1
Protest participation	0.11105	0.31421	0	1
Strike participation	0.05587	0.22967	0	1
Volunteered for a political party	0.04760	0.21293	0	1
Volunteered for anti-cuts organisation	0.01868	0.13539	0	1
Relative deprivation	0.45407	0.4979	0	1
Age	44.8188	14.812	18	88
Gender (male)	0.47207	0.49923	0	1
Education level (less than upper secondary)	0.24062	0.42747	0	1
Occupation (manual)	0.23773	0.42571	0	1
Unemployed	0.11722	0.32170	0	1
Political interest	0.64312	0.47909	0	1
Internal political efficacy	0.49393	0.39755	0	1
External political efficacy	0.47929	0.35868	0	1
Left–right values	5.23925	1.84270	0	10
Libertarian–authoritarian values	4.46535	1.87859	0	10
Organisational memberships	1.25324	2.38321	0	12
Unemployment rate 2014	11.9268	7.75242	4.5	26.5
N	17,667			

parties and anti-cuts organisations) but there are no gender differences for unconventional participation. In terms of the other classical controls, we can see that they largely behave as expected: greater political interest is generally linked with greater activism (except for engagement with anti-cuts organisations); both internal and external political efficacy tend to foster activism (external efficacy does not have an effect on striking and volunteering with anti-cuts organisations); more leftist and more libertarian individuals tend to be more engaged (though there do not seem to be left–right ideological differences for party volunteering or social value differences for conventional activism including party volunteering); having wider social networks also tends to foster involvement, with the exception of turnout.

Moving on to testing our hypotheses, Table 3, Models 1–6, include our key measure of relative deprivation, since we argued that in order for it to have an impact on participation, deprivation needs to be subjectively understood and experienced and that in particular a perceived change in circumstances as a result of the crisis should create grievances that spur individuals to unconventional participation.

H_1 and H_2 suggested that feelings of relative deprivation should depress conventional participation but spur unconventional participation. The results from Models 1–6 in Table 3 show that H_1 is not supported: relative deprivation has no effect on voting or volunteering for a party and rather stimulates contacting a politician. On the other hand, there is clear support for H_2: relative deprivation has a

Table 2 Variable distributions, by country

	All	France	Germany	Greece	Italy	Poland	Spain	Sweden	Switz.	UK
N	17,667	1934	1967	2030	1978	1947	1988	1916	1969	1938
Voted at last national election (%)	79.4	75.1	79.6	86.4	85.1	73.4	81.1	94.2	47.7	92.4
Contacted a politician (%)	13.4	7.9	10.2	12.3	11.7	13.8	13.3	14.7	11.4	25.1
Protest participation (%)	11.1	14.2	8.4	23.2	12.0	6.1	17.8	7.3	6.0	4.3
Strike participation (%)	5.6	5.4	3.5	13.7	11.6	2.1	8.7	0.6	1.8	2.3
Volunteered for a political party (%)	4.8	3.7	5.9	3.7	5.7	2.3	7.7	5.0	3.3	5.5
Volunteered for anti-cuts organisation (%)	1.9	1.6	1.7	2.2	3.0	2.0	4.0	0.5	0.9	0.9
Relative deprivation (%)	45.4	52.6	27.3	84.6	55.7	41.8	54.3	22.5	33.0	34.8
Age (mean)	44.8	48.7	44.2	39.9	44.2	41.5	43.0	47.2	43.8	51.2
Male (%)	47.2	44.1	51.9	46.7	47.5	44.5	50.1	46.0	47.2	46.8
Education (low) (%)	24.1	28.9	17.5	13.4	32.8	15.0	38.5	26.8	18.2	25.8
Manual occupation (%)	23.8	24.5	20.9	19.4	22.7	32.3	24.1	27.4	24.1	18.9
Unemployed (%)	11.7	9.1	4.0	27.5	17.2	11.5	18.8	5.4	6.5	4.5
Political interest (%)	64.3	56.3	71.0	62.9	60.0	73.7	57.7	63.9	58.4	75.5
Internal political efficacy 0–1 (mean)	0.49	0.39	0.59	0.49	0.48	0.51	0.45	0.40	0.48	0.66
External political efficacy 0–1 (mean)	0.48	0.40	0.48	0.35	0.57	0.65	0.49	0.46	0.44	0.49
Left–right values 0–10 (mean)	5.2	5.5	5.2	4.8	5.4	5.0	4.8	5.5	5.4	5.7
Libertarian–authoritarian 0–10 (mean)	4.5	4.9	4.0	4.7	4.8	5.4	3.7	3.7	4.5	4.5
Organisational memberships (0–12) (mean)	1.3	1.0	0.7	1.6	2.0	1.1	1.2	1.6	1.3	0.8
Unemployment rate 2014 (%)	11.8	10.3	5.0	26.5	12.7	9.0	24.4	8.0	4.5	6.1

Table 3 Multi-level logistic models predicting conventional, unconventional and social participation including macro-level unemployment

	(1) Voting	(2) Contacting	(3) Demonstrating	(4) Striking	(5) Volunteering party	(6) Volunteering anti-cuts
Relative dep.	0.01	0.10*	0.16**	0.23**	− 0.01	0.31*
	(0.05)	(0.05)	(0.06)	(0.08)	(0.09)	(0.15)
Age	0.03***	0.01***	− 0.01***	− 0.02***	− 0.00	− 0.01*
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)
Gender (male)	0.16***	0.25***	0.00	0.00	0.47***	0.28*
	(0.04)	(0.05)	(0.05)	(0.07)	(0.08)	(0.14)
Education (low)	− 0.24***	− 0.14*	− 0.07	− 0.22*	− 0.00	0.11
	(0.05)	(0.06)	(0.07)	(0.09)	(0.10)	(0.17)
Occupation (manual)	− 0.12*	− 0.14*	0.06	0.00	− 0.14	− 0.26
	(0.05)	(0.06)	(0.06)	(0.09)	(0.10)	(0.17)
Unemployed	− 0.26***	− 0.06	− 0.25**	− 0.52***	0.01	0.16
	(0.06)	(0.08)	(0.08)	(0.11)	(0.14)	(0.19)
Political interest	0.75***	0.84***	0.76***	0.39***	0.67***	− 0.02
	(0.05)	(0.07)	(0.07)	(0.09)	(0.13)	(0.18)
Internal political efficacy	0.63***	1.00***	0.78***	0.40***	1.45***	0.58**
	(0.06)	(0.07)	(0.08)	(0.10)	(0.13)	(0.20)
External political efficacy	− 0.16**	− 0.18*	− 0.18*	0.00	− 0.71***	0.10
	(0.06)	(0.07)	(0.08)	(0.11)	(0.12)	(0.21)
Left–right values (0–10)	0.05***	− 0.03*	− 0.18***	− 0.16***	0.03	− 0.19***
	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)	(0.05)
Libertarian–authoritarian values (0–10)	− 0.01	− 0.01	− 0.18***	− 0.08***	0.02	− 0.07
	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)	(0.05)
Organisational memberships (0–12)	− 0.01	0.16***	0.17***	0.16***	0.40***	0.53***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)

Table 3 continued

	(1) Voting	(2) Contacting	(3) Demonstrating	(4) Striking	(5) Volunteering party	(6) Volunteering anti-cuts
Unemployment 2014						
Constant	− 0.70*	− 3.54***	− 1.57***	− 2.17***	− 5.71***	− 5.40***
	(0.30)	(0.17)	(0.26)	(0.38)	(0.29)	(0.45)
N	17,667	17,667	17,667	17,667	17,667	17,667
Log lik.	− 7371.43	− 6150.31	− 5121.12	− 3186.09	− 2412.25	− 857.27
AIC	14,770.85	12,328.62	10,270.25	6400.17	4852.51	1742.55
BIC	14,879.77	12,437.54	10,379.16	6509.08	4961.42	1851.46
σu	0.83	0.32	0.64	0.98	0.51	0.59
ρ	0.17	0.03	0.11	0.23	0.07	0.10
	(7) Voting	(8) Contacting	(9) Demonstrating	(10) Striking	(11) Volunteering party	(12) Volunteering anti-cuts
Relative dep.	0.01	0.10*	0.16**	0.23**	− 0.01	0.29^{+}
	(0.05)	(0.05)	(0.06)	(0.08)	(0.09)	(0.15)
Age	0.03***	0.01***	− 0.01***	− 0.02***	− 0.00	− 0.01*
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)
Gender (male)	0.16***	0.25***	0.00	0.00	0.47***	0.29*
	(0.04)	(0.05)	(0.05)	(0.07)	(0.08)	(0.14)
Education (low)	− 0.24***	− 0.14*	− 0.07	− 0.22*	− 0.00	0.10
	(0.05)	(0.06)	(0.07)	(0.09)	(0.10)	(0.17)
Occupation (manual)	− 0.12*	− 0.14*	0.06	0.00	− 0.14	− 0.26
	(0.05)	(0.06)	(0.06)	(0.09)	(0.10)	(0.17)
Unemployed	− 0.26***	− 0.06	− 0.25**	− 0.52***	0.01	0.15
	(0.06)	(0.08)	(0.08)	(0.11)	(0.14)	(0.19)

Table 3 continued

	(7) Voting	(8) Contacting	(9) Demonstrating	(10) Striking	(11) Volunteering party	(12) Volunteering anti-cuts
Political interest	0.75***	0.84***	0.76***	0.39***	0.67***	− 0.01
	(0.05)	(0.07)	(0.07)	(0.09)	(0.13)	(0.18)
Internal political efficacy	0.63***	1.00***	0.78***	0.41***	1.45***	0.57**
	(0.06)	(0.07)	(0.08)	(0.10)	(0.13)	(0.20)
External political efficacy	− 0.16**	− 0.18*	− 0.18*	0.00	− 0.71***	0.11
	(0.06)	(0.07)	(0.08)	(0.11)	(0.12)	(0.21)
Left–right values (0–10)	0.05***	− 0.03*	− 0.18***	− 0.16***	0.03	− 0.19***
	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)	(0.05)
Libertarian–authoritarian values (0–10)	− 0.01	− 0.01	− 0.18***	− 0.08***	0.02	− 0.07
	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)	(0.05)
Organisational memberships (0–12)	− 0.01	0.16***	0.17***	0.16***	0.40***	0.53***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)
Unemployment 2014	0.03	− 0.00	0.07***	0.09**	0.00	0.03
	(0.03)	(0.01)	(0.02)	(0.03)	(0.02)	(0.02)
Constant	− 1.10*	− 3.50***	− 2.36***	− 3.21***	− 5.76***	− 5.80***
	(0.50)	(0.24)	(0.28)	(0.47)	(0.40)	(0.53)
N	17,667	17,667	17,667	17,667	17,667	17,667
Log lik.	− 7370.97	− 6150.28	− 5116.57	− 3183.18	− 2412.24	− 856.36
AIC	14,771.93	12,330.57	10,263.14	6396.36	4854.48	1742.71
BIC	14,888.63	12,447.26	10,379.83	6513.05	4971.17	1859.41
σu	0.79	0.32	0.38	0.69	0.51	0.52
ρ	0.16	0.03	0.04	0.13	0.07	0.08

Standard errors in parentheses

$^{+}p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

stimulating effect on all three unconventional activities: demonstrating, striking and volunteering with an anti-cuts organisation. The effect is particularly strong for the latter two activities; demonstrating is also stimulated, and more so than contacting a politician—the one conventional activity that also showed a positive relationship with relative deprivation.

Moving on to the evidence in Models 1–6 from Table 3 for H_3 and H_4—which suggested that resource-poor groups (those with lower education, manual workers and the unemployed) should be less likely to engage in conventional activities and more likely to engage in unconventional activities—we find some evidence for H_3: individuals with lower education are less likely to vote and contact a politician (but they are not less likely to volunteer for a party), individuals in manual occupations are also less likely to vote and contact a politician (but they are not less likely to volunteer for a party), unemployed individuals are less likely to vote (but they are not less likely to contact a politician or volunteer for a party). As such, while H_3 is confirmed for voting across all three resource-poor groups, the idea that being in a resource-poor group depresses other forms of conventional participation (contacting a politician and volunteering for a party) is not as widely supported. Moving on to H_4—suggesting that resource-poor groups are more likely to become involved in unconventional participation as 'weapons of the weak'—we find that individuals with lower education are not more likely to become involved in these actions (there are no differences for demonstrating and volunteering for an anti-cuts organisation whereas there is a negative effect of belonging to this group for striking). There are also no differences by occupation so manual workers are not more likely to engage in unconventional participation; unemployed people are in fact less likely to demonstrate, strike (possibly due to their restricted networks given the lack of employment and the lower chances to be asked to participate) and there is no difference for volunteering in anti-cuts organisations. As such H_4 is not supported by the results of our modelling. Rather, where there is any difference by resources at all, being resource-poor appears to depress participation—as was also found for conventional activism. This finding shows that absolute types of deprivation such as having lower resources depress all types of participation whereas subjective feelings of relative deprivation can act to spur protest action. As such, this finding further underscores the critical importance of distinguishing between relative and absolute types of deprivation.

To examine the evidence in favour or against our next set of hypotheses, H_5 and H_6 on the effect of the economic context, we turn to the results from Models 7–12 in Table 3, for the same set of six indicators (thee conventional and three unconventional). Models 7–12 also include a measure for economic context, unemployment, perhaps the most visible symbol of the deterioration of the economy following economic crisis and the one that is likely to show the greatest toll in terms of loss of opportunities and the undermining of government credibility with respect to their ability to run the economy. We can see here that whereas H_5 is not supported since a negative economic context does not depress conventional participation, there is evidence for H_6 with both demonstrating and striking are higher in more negative economic contexts.

Table 4 Multi-level logistic models predicting conventional, unconventional and social participation including macro-level unemployment and cross-level interactions with relative deprivation and low education

	(1) Voting	(2) Contacting	(3) Demonstrating	(4) Striking	(5) Volunteering party	(6) Volunteering anti-cuts
Relative dep.	− 0.02	0.14	− 0.10	0.06	− 0.09	0.18
	(0.08)	(0.09)	(0.11)	(0.17)	(0.17)	(0.31)
Age	0.03***	0.01***	− 0.01***	− 0.02***	− 0.00	− 0.01*
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)
Gender (male)	0.16***	0.25***	− 0.00	− 0.00	0.47***	0.29*
	(0.04)	(0.05)	(0.05)	(0.07)	(0.08)	(0.14)
Education (low)	− 0.24***	− 0.14*	− 0.07	− 0.22*	− 0.00	0.10
	(0.05)	(0.06)	(0.07)	(0.09)	(0.10)	(0.17)
Occupation (manual)	− 0.12*	− 0.14*	0.06	0.00	− 0.13	− 0.26
	(0.05)	(0.06)	(0.06)	(0.09)	(0.10)	(0.17)
Unemployed	− 0.26***	− 0.06	− 0.25**	− 0.53***	0.01	0.15
	(0.06)	(0.08)	(0.08)	(0.11)	(0.14)	(0.19)
Political interest	0.75***	0.84***	0.76***	0.39***	0.67***	− 0.02
	(0.05)	(0.07)	(0.07)	(0.09)	(0.13)	(0.18)
Internal political efficacy	0.63***	1.00***	0.78***	0.40***	1.45***	0.57**
	(0.06)	(0.07)	(0.08)	(0.10)	(0.13)	(0.20)
External political efficacy	− 0.15**	− 0.18*	− 0.18*	0.01	− 0.71***	0.11
	(0.06)	(0.07)	(0.08)	(0.11)	(0.12)	(0.21)
Left–right values (0–10)	0.05***	− 0.03*	− 0.18***	− 0.16***	0.03	− 0.19***
	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)	(0.05)
Libertarian–authoritarian values (0–10)	− 0.01	− 0.01	− 0.18***	− 0.07***	0.02	− 0.07
	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)	(0.05)

Table 4 continued

	(1) Voting	(2) Contacting	(3) Demonstrating	(4) Striking	(5) Volunteering party	(6) Volunteering anti-cuts
Organisational memberships (0–12)	− 0.01	0.16***	0.17***	0.16***	0.40***	0.53***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)
Unemployment 2014	0.03	− 0.00	0.06**	0.08**	0.00	0.03
	(0.03)	(0.01)	(0.02)	(0.03)	(0.02)	(0.03)
Relative deprivation × unemployment 2014	0.00	− 0.00	0.02*	0.01	0.01	0.01
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)
Low education × unemployment 2014						
Constant	− 1.09*	− 3.52***	− 2.25***	− 3.13***	− 5.72***	− 5.76***
	(0.50)	(0.24)	(0.28)	(0.48)	(0.41)	(0.54)
N	17,667	17,667	17,667	17,667	17,667	17,667
Log lik.	− 7370.89	− 6150.16	− 5113.27	− 3182.50	− 2412.07	− 856.28
AIC	14,773.78	12,332.31	10,258.55	6397.01	4856.14	1744.55
BIC	14,898.25	12,456.78	10,383.02	6521.48	4980.61	1869.02
σu	0.79	0.32	0.39	0.70	0.51	0.52
ρ	0.16	0.03	0.04	0.13	0.07	0.08

	(7) Voting	(8) Contacting	(9) Demonstrating	(10) Striking	(11) Volunteering party	(12) Volunteering anti-cuts
Relative dep.	0.01	0.10*	0.16**	0.23**	− 0.01	0.29
	(0.05)	(0.05)	(0.06)	(0.08)	(0.09)	(0.15)
Age	0.03***	0.01***	− 0.01***	− 0.02***	− 0.00	− 0.01*
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)
Gender (male)	0.16***	0.25***	0.00	0.00	0.46***	0.29*
	(0.04)	(0.05)	(0.05)	(0.07)	(0.08)	(0.14)

Table 4 continued

	(7) Voting	(8) Contacting	(9) Demonstrating	(10) Striking	(11) Volunteering party	(12) Volunteering anti-cuts
Education (low)	− 0.45***	− 0.22	− 0.03	0.10	− 0.47*	0.07
	(0.09)	(0.11)	(0.14)	(0.20)	(0.20)	(0.35)
Occupation (manual)	− 0.12*	− 0.13*	0.06	− 0.00	− 0.13	− 0.26
	(0.05)	(0.06)	(0.06)	(0.09)	(0.10)	(0.17)
Unemployed	− 0.27***	− 0.07	− 0.25**	− 0.51***	− 0.02	0.15
	(0.06)	(0.08)	(0.08)	(0.11)	(0.14)	(0.19)
Political interest	0.76***	0.84***	0.76***	0.39***	0.68***	− 0.01
	(0.05)	(0.07)	(0.07)	(0.09)	(0.13)	(0.18)
Internal political efficacy	0.63***	1.01***	0.78***	0.40***	1.46***	0.57**
	(0.06)	(0.07)	(0.08)	(0.10)	(0.13)	(0.20)
External political efficacy	− 0.15*	− 0.17*	− 0.18*	0.00	− 0.71***	0.11
	(0.06)	(0.07)	(0.08)	(0.11)	(0.12)	(0.21)
Left–right values (0–10)	0.05***	− 0.03*	− 0.18***	− 0.16***	0.03	− 0.19***
	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)	(0.05)
Libertarian–authoritarian values (0–10)	− 0.01	− 0.01	− 0.18***	− 0.08***	0.02	− 0.07
	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)	(0.05)
Organisational memberships (0–12)	− 0.01	0.16***	0.17***	0.16***	0.40***	0.53***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)
Unemployment 2014	0.03	− 0.00	0.07***	0.09**	− 0.00	0.03
	(0.03)	(0.01)	(0.02)	(0.03)	(0.02)	(0.02)
Relative deprivation × unemployment 2014						
Low education × unemployment 2014	0.02**	0.01	− 0.00	− 0.02	0.04**	0.00
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)

Table 4 continued

	(7) Voting	(8) Contacting	(9) Demonstrating	(10) Striking	(11) Volunteering party	(12) Volunteering anti-cuts
Constant	− 1.06*	− 3.49***	− 2.37***	− 3.24***	− 5.69***	− 5.80***
	(0.50)	(0.24)	(0.28)	(0.47)	(0.40)	(0.53)
N	17,667	17,667	17,667	17,667	17,667	17,667
Log lik.	− 7367.50	− 6149.97	− 5116.52	− 3181.72	− 2408.36	− 856.35
AIC	14,766.99	12,331.94	10,265.04	6395.44	4848.72	1744.70
BIC	14,891.46	12,456.41	10,389.51	6519.92	4973.19	1869.17
σu	0.79	0.32	0.38	0.69	0.50	0.52
ρ	0.16	0.03	0.04	0.13	0.07	0.08

Standard errors in parentheses

$^{+}p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

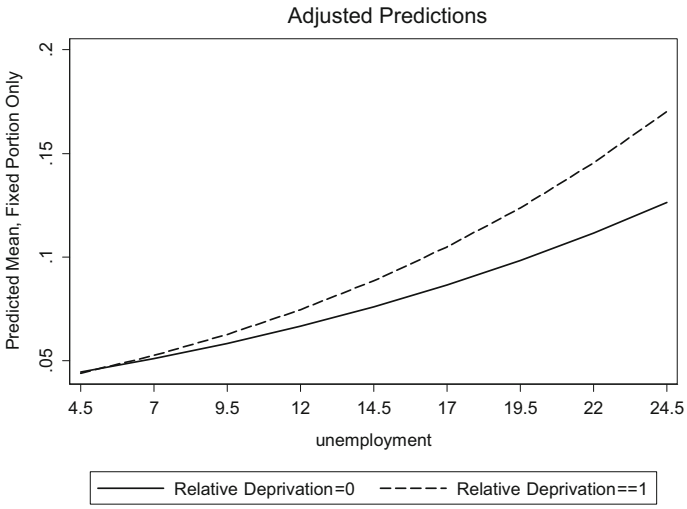

Fig. 1 Demonstrating. Plot of the cross-level interaction between relative deprivation and unemployment (adjusted predictions Model 3, Table 4)

Next, we turn to analysing the evidence for H_7 and H_8 on the cross-level interaction between a negative economic context and feelings of relative deprivation presented in Models 1–6 of Table 4. Here, we find no evidence supporting H_7 on negative economic context emphasising the negative effect of relative deprivation for depressing conventional activism, whereas there is evidence in support of H_8 for demonstrating: the positive effect of feelings of relative deprivation is further increased in negative economic contexts. In other words, in more negative economic contexts, the gap between those who felt deterioration in their living standards and those that did not increases. This result supporting H_8 is visually illustrated in Fig. 1. Model 3 from Table 4 with one cross-level interaction for relative deprivation and unemployment showed that the coefficient for relative deprivation is − 0.10 and not significant, which means that there is no difference between those who are relatively more or less deprived when the unemployment rate is 0. The positive and statistically significant coefficient for the interaction term between relative deprivation and unemployment (0.02) suggests that the gap between those who are relatively more or less deprived increases as unemployment goes up. For every percentage point increase in the unemployment rate, the gap in the log-odds of protesting increases by 0.02. At what point do the relatively deprived start protesting at higher levels than those who do not feel deprived? These estimates suggest that the two groups start departing when unemployment reaches a level of 5% (i.e. $-0.10/0.02 = -5$), that is, quite low.

Finally, we turn to examining the evidence for H_9 presented in Models 7–12 of Table 4 (lower education) and in Table 5 Models 1–6 (manual workers) and Models 7–12 (unemployed). Examining first the impact of a negative economic context on the participation of individuals with a lower education, we find that against H_9, rather than further increasing the gap between more resource-poor and more

Table 5 Multi-level logistic models predicting conventional, unconventional and social participation including macro-level unemployment and cross-level interactions with manual occupation and unemployed status

	(1) Voting	(2) Contacting	(3) Demonstrating	(4) Striking	(5) Volunteering party	(6) Volunteering anti-cuts
Relative dep.	0.01	0.10*	0.16**	0.23**	− 0.01	0.30*
	(0.05)	(0.05)	(0.06)	(0.08)	(0.09)	(0.15)
Age	0.03***	0.01***	− 0.01***	− 0.02***	− 0.00	− 0.01*
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)
Gender (male)	0.16***	0.25***	0.00	0.00	0.47***	0.29*
	(0.04)	(0.05)	(0.05)	(0.07)	(0.08)	(0.14)
Education (low)	− 0.24***	− 0.14*	− 0.07	− 0.22*	− 0.00	0.10
	(0.05)	(0.06)	(0.07)	(0.09)	(0.11)	(0.17)
Occupation (manual)	− 0.17	− 0.24*	0.11	0.44*	− 0.49*	− 0.96*
	(0.09)	(0.11)	(0.13)	(0.18)	(0.19)	(0.37)
Unemployed	− 0.26***	− 0.07	− 0.25**	− 0.52***	− 0.00	0.13
	(0.06)	(0.08)	(0.08)	(0.11)	(0.14)	(0.19)
Political interest	0.75***	0.84***	0.76***	0.39***	0.67***	− 0.02
	(0.05)	(0.07)	(0.07)	(0.09)	(0.13)	(0.18)
Internal political efficacy	0.63***	1.00***	0.78***	0.41***	1.45***	0.58**
	(0.06)	(0.07)	(0.08)	(0.10)	(0.13)	(0.20)
External political efficacy	− 0.15**	− 0.17*	− 0.18*	0.00	− 0.71***	0.11
	(0.06)	(0.07)	(0.08)	(0.11)	(0.12)	(0.21)
Left–right values (0–10)	0.05***	− 0.03*	− 0.18***	− 0.16***	0.02	− 0.19***
	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)	(0.05)
Libertarian–authoritarian values (0–10)	− 0.01	− 0.01	− 0.18***	− 0.08***	0.02	− 0.06
	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)	(0.05)

Table 5 continued

	(1) Voting	(2) Contacting	(3) Demonstrating	(4) Striking	(5) Volunteering party	(6) Volunteering anti-cuts
Organisational memberships (0–12)	− 0.01	0.16***	0.17***	0.16***	0.40***	0.53***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)
Unemployment 2014	0.03	− 0.01	0.07***	0.09**	− 0.00	0.03
	(0.03)	(0.01)	(0.02)	(0.03)	(0.02)	(0.02)
Manual employment × unemployment 2014	0.00	0.01	− 0.00	− 0.03**	0.03*	0.05*
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)
Unemployed × unemployment 2014						
Constant	− 1.08*	− 3.48***	− 2.38***	− 3.32***	− 5.67***	− 5.66***
	(0.50)	(0.24)	(0.28)	(0.48)	(0.40)	(0.53)
N	17,667	17,667	17,667	17,667	17,667	17,667
Log lik.	− 7370.70	− 6149.64	− 5116.48	− 3179.62	− 2409.87	− 853.97
AIC	14,773.39	12,331.28	10,264.95	6391.23	4851.74	1739.94
BIC	14,897.86	12,455.76	10,389.42	6515.70	4976.22	1864.41
σu	0.79	0.32	0.38	0.70	0.51	0.51
ρ	0.16	0.03	0.04	0.13	0.07	0.07

	(7) Voting	(8) Contacting	(9) Demonstrating	(10) Striking	(11) Volunteering party	(12) Volunteering anti-cuts
Relative dep.	0.01	0.10*	0.16**	0.24**	− 0.01	0.29
	(0.05)	(0.05)	(0.06)	(0.08)	(0.09)	(0.15)
Age	0.03***	0.01***	− 0.01***	− 0.02***	− 0.00	− 0.01*
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)
Gender (male)	0.16***	0.25***	0.00	0.00	0.47***	0.29*
	(0.04)	(0.05)	(0.05)	(0.07)	(0.08)	(0.14)

Table 5 continued

	(7) Voting	(8) Contacting	(9) Demonstrating	(10) Striking	(11) Volunteering party	(12) Volunteering anti-cuts
Education (low)	− 0.25***	− 0.15*	− 0.07	− 0.22*	− 0.01	0.10
	(0.05)	(0.06)	(0.07)	(0.09)	(0.10)	(0.17)
Occupation (manual)	− 0.12*	− 0.14*	0.06	− 0.00	− 0.14	− 0.26
	(0.05)	(0.06)	(0.06)	(0.09)	(0.10)	(0.17)
Unemployed	− 0.48***	− 0.20	− 0.45*	− 0.83**	− 0.29	− 0.24
	(0.13)	(0.17)	(0.21)	(0.31)	(0.31)	(0.48)
Political interest	0.75***	0.84***	0.76***	0.39***	0.67***	− 0.02
	(0.05)	(0.07)	(0.07)	(0.09)	(0.13)	(0.18)
Internal political efficacy	0.63***	1.00***	0.78***	0.41***	1.45***	0.58**
	(0.06)	(0.07)	(0.08)	(0.10)	(0.13)	(0.20)
External political efficacy	− 0.16**	− 0.18*	− 0.18*	0.00	− 0.71***	0.10
	(0.06)	(0.07)	(0.08)	(0.11)	(0.12)	(0.21)
Left–right values (0–10)	0.05***	− 0.03*	− 0.18***	− 0.16***	0.03	− 0.19***
	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)	(0.05)
Libertarian–authoritarian values (0–10)	− 0.01	− 0.01	− 0.18***	− 0.08***	0.02	− 0.07
	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)	(0.05)
Organisational memberships (0–12)	− 0.01	0.16***	0.17***	0.16***	0.40***	0.53***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)
Unemployment 2014	0.03	− 0.00	0.07***	0.09**	0.00	0.03
	(0.03)	(0.01)	(0.02)	(0.03)	(0.02)	(0.02)
Manual employment × unemployment 2014						
Unemployed × unemployment 2014	0.02*	0.01	0.01	0.02	0.02	0.02
	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)	(0.02)

Table 5 continued

	(7) Voting	(8) Contacting	(9) Demonstrating	(10) Striking	(11) Volunteering party	(12) Volunteering anti-cuts
Constant	− 1.06*	− 3.49***	− 2.34***	− 3.18***	− 5.73***	− 5.77***
	(0.50)	(0.24)	(0.28)	(0.47)	(0.40)	(0.53)
N	17,667	17,667	17,667	17,667	17,667	17,667
Log lik.	− 7368.90	− 6149.83	− 5115.95	− 3182.59	− 2411.64	− 855.96
AIC	14,769.80	12,331.66	10,263.91	6397.18	4855.28	1743.92
BIC	14,894.27	12,456.13	10,388.38	6521.65	4979.75	1868.39
σu	0.79	0.32	0.38	0.70	0.51	0.52
ρ	0.16	0.03	0.04	0.13	0.07	0.08

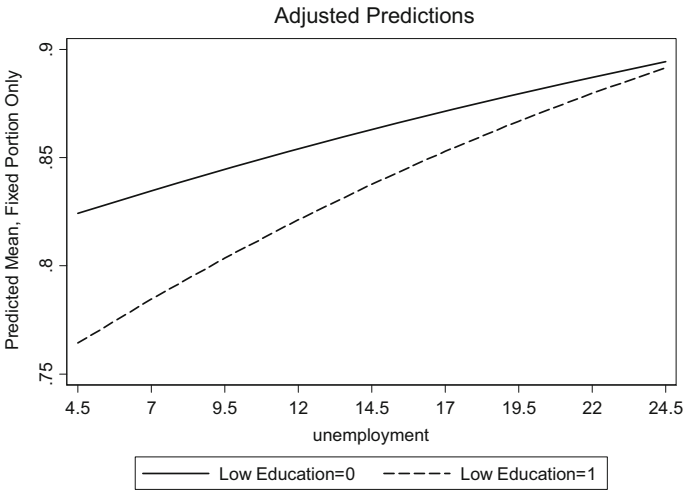

Fig. 2 Voting. Plot of the cross-level interaction between low education and unemployment (adjusted predictions Model 7, Table 4)

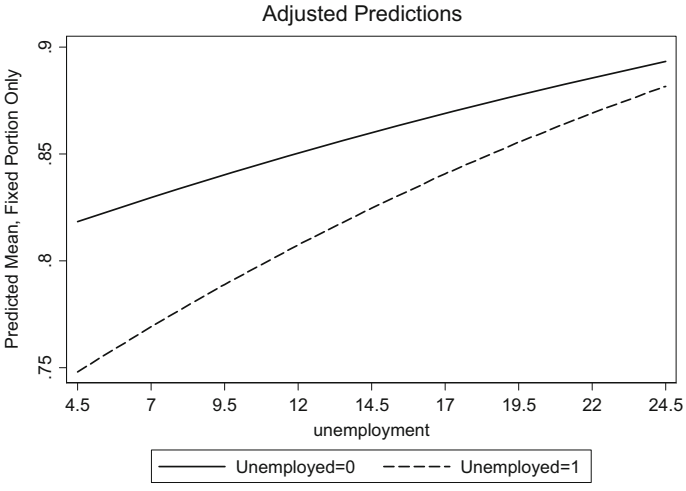

Fig. 3 Voting. Plot of the cross-level interaction between unemployed employment status and unemployment (adjusted predictions Model 7, Table 3)

resource-rich groups with respect to education, a negative economic context actually closes the participatory gap. In other words, while individuals with a lower education are less likely than individuals with a higher education to vote, this gap closes in contexts that are more negative. This signals that particularly negative economic conditions actually have a mobilising effect for individuals in more vulnerable social positions, making them more likely to attend the polling booth. This is illustrated graphically in Fig. 2. Model 7 from Table 4 for voting shows that the coefficient for low education is − 0.45 and significant, which means that those

with lower education are less likely to vote when the unemployment rate is 0. The positive and statistically significant coefficient for the interaction term between low education and unemployment (0.02) suggests that the gap between those who are relatively more or less educated decreases as unemployment goes up. For every percentage point increase in the unemployment rate, the gap in the log-odds of voting decreases by 0.02. At what point do individuals with lower education start voting at the same levels as those with higher education? These estimates suggest that the two groups converge when unemployment reaches a level of 22.5% (i.e. $-0.45/0.02 = -22.5$).

The same pattern is found when looking at the unemployed group (Model 7 Table 5) as illustrated in Fig. 3. Model 7 from Table 5 for voting shows that the coefficient for unemployed is -0.48 and significant, which means that the unemployed are less likely to vote when the unemployment rate is 0. The positive and statistically significant coefficient for the interaction term between manual occupation and unemployment (0.02) suggests that the two groups converge when unemployment reaches a level of 24% (i.e. $-0.48/0.02 = 24$). As such, once again these results show that particularly negative macro-economic contexts can act to mobilise resource-poor groups, in this case, spurring the unemployed to vote. While unemployed people are less likely to vote in better economic contexts, the gap closes in particularly negative economic contexts so that these have a mobilising effect for this group when it comes to voting. Moreover, a similar pattern occurs for another conventional activity, volunteering for a party for both the low education (Model 11 Table 4), and manual workers (Model 5 Table 5) groups. While individuals with lower education are less likely to volunteer with a party in more positive economic contexts, this gap reverses and they become more likely to become involved with parties in particularly negative economic contexts. This is

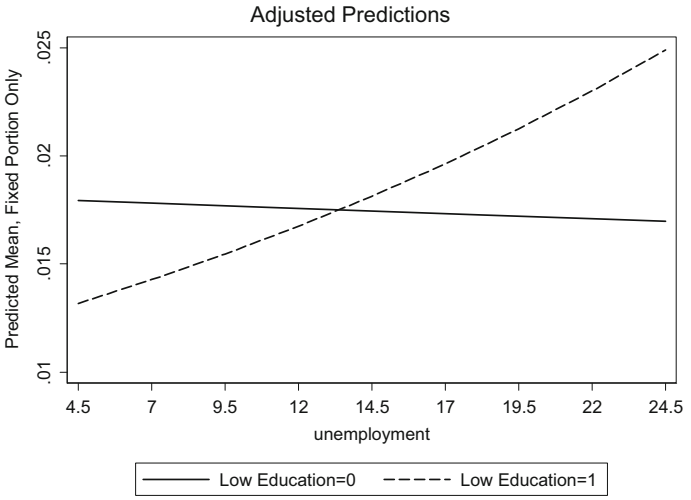

Fig. 4 Volunteering for a party. Plot of the cross-level interaction between low education and unemployment (adjusted predictions Model 11, Table 4)

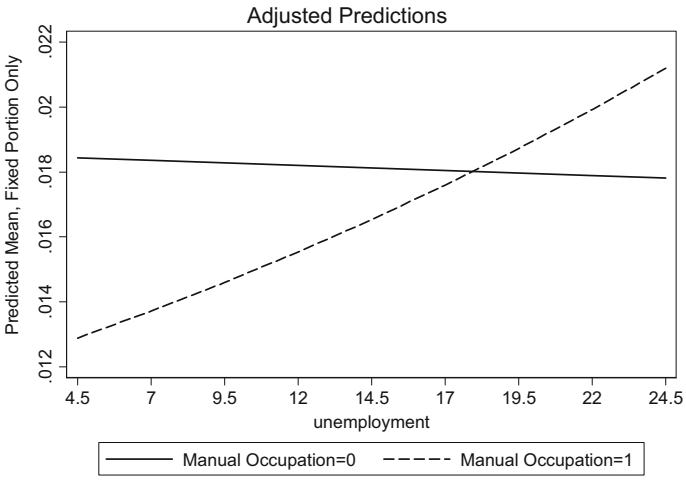

Fig. 5 Volunteering for a party. Plot of the cross-level interaction between manual occupation and unemployment (adjusted predictions Model 5, Table 5)

illustrated in Fig. 4. Here, we can see that Model 11 from Table 4 shows that the coefficient for low education is − 0.47 and significant, which means that those with lower education are less likely to volunteer with a party when the unemployment rate is 0. The positive and statistically significant coefficient for the interaction term between low education and unemployment (0.04) suggests that those who are relatively less educated become more mobilised relative to those who are more educated as unemployment goes up. At what point do individuals with lower education start volunteering at the same levels as those with higher education? These estimates suggest that the two groups converge when unemployment reaches a level of 11.75% (i.e. − 0.47/0.04 = − 11.75).

The same pattern for volunteering with a party occurs for manual workers (Model 5 Table 5). While individuals in manual occupations are less likely to volunteer with a party when the economic context is better, this gap reverses and they become more likely to become involved with parties in particularly negative economic contexts. This is illustrated in Fig. 5. Model 5 from Table 5 for volunteering for a party shows that the coefficient for manual occupation is − 0.49 and significant, which means that those with a manual occupation are less likely to volunteer when the unemployment rate is 0. The positive and statistically significant coefficient for the interaction term between manual occupation and unemployment (0.03) suggests that the two groups converge when unemployment reaches a level of 16.33% (i.e. − 0.49/0.03 = − 16.33).

As such, we find evidence going in the opposite direction of H_9: a negative economic context closes or reverses—rather than further widening as we had expected—the gap in conventional participation (both voting and volunteering in political parties) between resource-poor and more resource-rich groups. This suggests that particularly negative economic contexts have the potential to mobilise those groups that tend to be less politically active. One could theorise that in

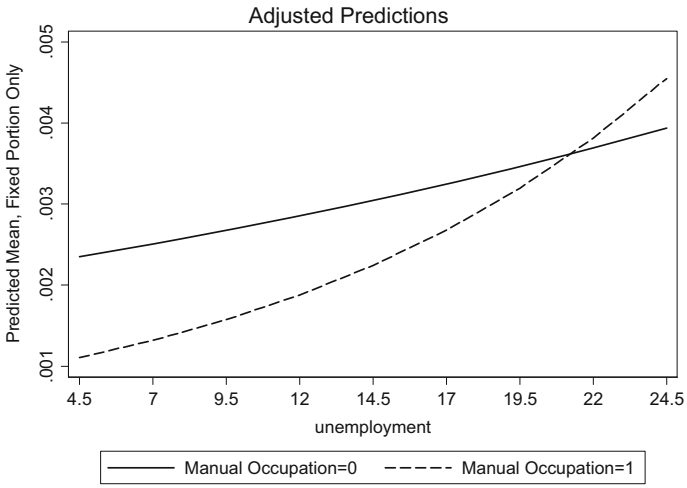

Fig. 6 Volunteering for anti-cuts organisation. Plot of the cross-level interaction between manual occupation and unemployment (adjusted predictions Model 6, Table 5)

particularly negative contexts individuals that normally do not participate come to perceive participation as more important, as a more necessary action in the face of threats or the potential loss of opportunities once afforded. For example, high unemployment might draw people to punish the incumbents or vote for protest parties and to become involved with parties proposing solutions to the current problems.

Finally, we turn to examining the evidence for H_{10} presented in Models 7–12 of Table 4 (lower education) and in Table 5 Models 1–6 (manual workers) and Models

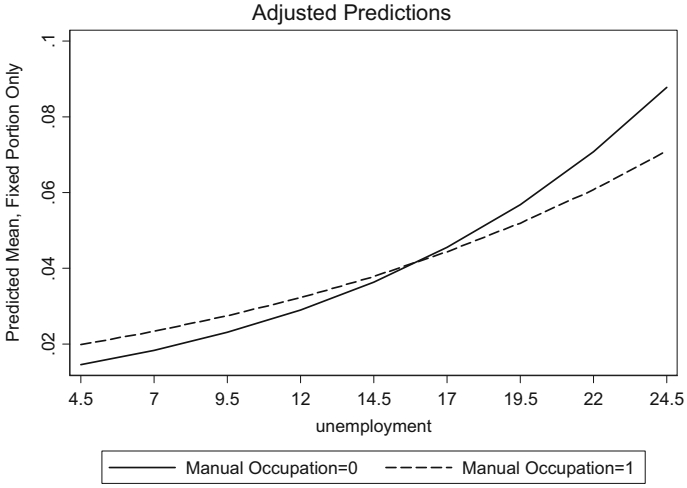

Fig. 7 Striking. Plot of the cross-level interaction between manual occupation and unemployment (adjusted predictions Model 4, Table 5)

7–12 (unemployed). Here, we find that the pattern for manual workers volunteering for an anti-cuts organisation (Model 6 Table 5) is very similar once more to that found for conventional participation. While individuals in manual occupations are less likely to participate in more positive economic contexts, a negative economic context reverses this pattern, mobilising individuals in manual occupations. This is illustrated in Fig. 6. Model 6 from Table 5 for volunteering for an anti-cuts organisation shows that the coefficient for manual occupation is − 0.96 and significant, which means that those with a manual occupation are less likely to volunteer when the unemployment rate is 0. The positive and statistically significant coefficient for the interaction term between manual occupation and unemployment (0.05) suggests that the two groups converge when unemployment reaches a level of 19.2% (i.e. − 0.96/0.05 = − 19.2).

On the other hand, striking shows a different pattern: individuals in manual occupations are more likely to strike in less negative economic contexts but this gap reverses in more negative economic contexts (Model 4 Table 5). This is illustrated in Fig. 7. Model 4 from Table 5 for striking shows that the coefficient for manual occupation is 0.44 and significant, which means that those with a manual occupation are more likely to strike when the unemployment rate is 0. The negative and statistically significant coefficient for the interaction term between manual occupation and unemployment (− 0.03) suggests that the two groups converge when unemployment reaches a level of 14.67% (i.e. 0.44/− 0.03 = − 14.67). Perhaps this is since when economic conditions are particularly bad, individuals in manual occupations feel that it is riskier to strike since there is a larger 'reserve army' that could be brought into do their jobs. Therefore, while we found that individuals who felt they were more deprived were even more likely to protest in negative economic contexts, we found that individuals in manual occupations were less likely to strike when the macro-level context was more deteriorated. We interpret this result in light of the divergent cost–benefit analysis that individuals face with respect to the different types of activities and the implications of a deteriorated macro-level context. Whereas for protest this might signal a wider politicisation of feelings of relative deprivation and thus more general societal support, for striking this might signal that it is less likely that results will be obtained since other people in potentially more deprived situations could be shipped in.

Taken together, our results show that both feelings of relative deprivation and a negative economic context tend to stimulate unconventional activism. A lack of resources on the other hand had demobilising impact on most types of activism, and more so the conventional types. Overall, we found no support for H_1 that relative deprivation depresses conventional participation; we found support for H_2 with respect to the positive effect of relative deprivation on unconventional activism: demonstrating, striking and volunteering for anti-cuts organisation. We found mixed support H_3 that resource-poor groups are less likely to engage in some forms of conventional activism, but found little evidence for H_4 that being in resource-poor groups stimulates unconventional activism. As for H_5 we did not find evidence that a negative economic context depresses conventional activism, but there was support for H_6 for unconventional activism: demonstrating and striking are higher in more negative economic contexts.

In terms of the conditional hypotheses with relative deprivation and economic context, we found no evidence for H_7 for conventional participation but did find evidence for H_8 with respect to unconventional activism for protest alone. Finally, with respect to the conditional hypotheses H_9–H_{10}, we found evidence that a negative economic context generally has the effect of enhancing conventional participation (and also volunteering in anti-cuts organisations, an unconventional activity) rather than demobilising the participation of more resource-poor groups. On the other hand, we found that a negative economic context interacted with being in a manual occupation to inhibit strike activity at higher levels of unemployment.

Conclusion

This paper adds to the growing literature on the effects of deprivation and economic crisis for various aspects of political life (English et al. 2016; Temple et al. 2016; Temple and Grasso 2017). More specifically, the current investigation has shown that feelings of relative deprivation and resources have divergent effects on conventional and unconventional participation. While feelings of relative deprivation tend to stimulate participation, particularly of the unconventional type, being more resource poor has the effect of depressing participation, and more so for conventional activism (Grasso 2011). Moreover, the current paper showed that negative economic contexts tend to spur unconventional participation but not conventional activism. Additionally, the effects of feelings of deprivation for protest activism were found to be amplified in negative economic contexts. On the other hand, negative economic contexts were found to close or reverse the gap between individuals in resource-poor groups and those in more resource-rich groups with respect to conventional activism—but also volunteering in anti-cuts organisations. Thus, we have shown that while individual level feelings of relative deprivation have mobilising effects for protest, this effect is amplified in wider negative economic contexts (see also Grasso and Giugni 2016). We also found that negative economic contexts can act to mobilise more resource-poor groups, such as those with lower education, in manual occupations or the unemployed, leading them to participate at higher rates than more resource-rich individuals when economic conditions are particularly bad. We showed that in particularly negative economic contexts individuals with lower resources (lower education, unemployed) closed the voting gap with more resource-rich sections of the population, as well as the gap in volunteering with parties (lower education, manual occupations) and in volunteering with anti-cuts organisations (manual occupations). On the other hand, we found that more negative macro-economic contexts actually had a demobilising effect on individuals in manual occupations with respect to striking which we interpreted in terms of the higher risks that individuals in more vulnerable labour market positions might attach to this type of political action in more turbulent economic times.

The recent economic crisis can be understood to have exacerbated feelings of deprivation and inequalities and therefore to have either spurred or depressed the political involvement of more deprived groups (Giugni and Grasso 2015a, 2017; Grasso and Giugni 2013). In this paper, we utilised an original survey dataset

collected in the context of a European project in 2015 ($N = 17{,}667$) and showed that while being resource-poor has a negative effect on different aspects of participation, feelings of relative deprivation can act as catalysts, particularly for unconventional participation. Testing for cross-level interactions, we showed that negative economic contexts can have a mobilising effect, closing or reversing the gap between resource-poor and resource-rich groups with respect to certain types of political action while also increasing the impact of feelings of relative deprivation for protest participation. As such, this research underlies the importance of studying the interaction between both subjective feelings of deprivation and inequalities with macro-level contexts for understanding the dynamics of political participation in advanced democracies. We urge further studies to apply micro–macro interactive analyses in the future to continue to develop new insights in this important research area for democratic societies.

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References

Almond, G., and S. Verba. 1963. *The Civic Culture: Political Attitudes and Democracy in Five Nations*. London: Sage.

Barnes, S., and M. Kaase. 1979. *Political Action: Mass Participation in Five Western Societies*. Thousand Oaks, CA: Sage.

Benford, R.D., and D.A. Snow. 2000. Framing Processes and Social Movements: An Overview and Assessment. *Annual Review of Sociology* 26: 611–639.

Berger, S. (ed.). 1982. *Organizing Interests in Western Europe*. Cambridge: Cambridge University Press.

Bourdieu, P. 1983. The Forms of Capital. In *Handbook of Theory and Research for the Sociology of Education*, ed. J.G. Richardson. New York, NY: Greenwood.

Brady, H., S. Verba, and K.L. Scholzman. 1995. Beyond SES? A Resource Model of Political Participation. *American Political Science Review* 89: 271–294.

Buechler, S.M. 2004. The Strange Career of Strain and Breakdown Theories of Collective Action. In *The Blackwell Companion to Social Movements*, ed. D.A. Snow, S. Soule, and H. Kriesi, 47–66. Malden, MA: Blackwell.

Coleman, J. 1990. *Foundations of Social Theory*. Cambridge, MA: Belknap Press.

Curtis, J.E., D.E. Baer, and E.G. Grabb. 2001. Nations of Joiners: Explaining Voluntary Association Membership in Democratic Societies. *American Sociological Review* 2 (66): 783–805.

Davis, J. 1959. A Formal Interpretation of the Theory of Relative Deprivation. *Sociometry* 22: 280–296.

De Grauwe, P., and Y. Ji. 2013. From Panic-Driven Austerity to Symmetric Macroeconomic Policies in the Eurozone. *Journal of Common Market Studies* 51: 31–41.

Dunn, A., M.T. Grasso, and C. Saunders. 2014. Unemployment and Attitudes to Work: Asking the 'Right' Question. *Work, Employment & Society* 28: 904–925.

Eckstein, H. 1961. *A Theory of Stable Democracy*. Princeton, NJ: Princeton University Press.
English, P., M.T. Grasso, B. Buraczynska, S. Karampampas, and L. Temple. 2016. Convergence on Crisis? Comparing Labour and Conservative Party Framing of the Economic Crisis in Britain, 2008-2014. *Politics & Policy* 44: 577–603.
Evans, G., and J. Tilley. 2017. *The New Class War: Excluding the Working Class in 21st-Century Britain*. Oxford: Oxford University Press.
Feather, N.T. 1989. *The Psychological Impact of Unemployment*. London: Springer.
Foster, M., and K. Matheson. 1995. Double Relative Deprivation: Combining the Personal and Political. *Personality and Social Psychology Bulletin* 21: 1167–1177.
Gamson, W.A. 1992. *Talking Politics*. New York, NY: Cambridge University Press.
Giugni, M., and M.T. Grasso (eds.). 2015a. *Austerity and Protest: Popular Contention in Times of Economic Crisis*. London: Routledge.
Giugni, M., and M.T. Grasso. 2015b. Environmental Movements in Advanced Industrial Democracies: Heterogeneity, Transformation, and Institutionalization. *Annual Review of Environment and Resources* 40: 337–361.
Giugni, M., and M.T. Grasso. 2016. How Civil Society Actors Responded to the Economic Crisis: The Interaction of Material Deprivation and Perceptions of Political Opportunity Structures. *Politics & Policy* 44: 447–472.
Giugni, M., and M.T. Grasso (eds.). 2017. *Citizens and the Crisis: Perceptions, Experiences, and Responses to the Great Recession in Europe*. London: Palgrave Macmillan.
Grasso, M.T. 2011. Political Participation in Western Europe. D.Phil. thesis, Nuffield College, University of Oxford.
Grasso, M.T. 2013. The Differential Impact of Education on Young People's Political Activism: Comparing Italy and the United Kingdom. *Comparative Sociology* 12: 1–30.
Grasso, M.T. 2014. Age-Period-Cohort Analysis in a Comparative Context: Political Generations and Political Participation Repertoires. *Electoral Studies* 33: 63–76.
Grasso, M.T. 2016. *Generations, Political Participation and Social Change in Western Europe*. London: Routledge.
Grasso, M.T. 2018. Young People's Political Participation in Times of Crisis. In *Young People Regenerating Politics in Times of Crisis*, ed. S. Pickard, and J. Bessant, 179–196. London: Palgrave.
Grasso, M.T., and Giugni, M. 2013. Anti-austerity Movements: Old Wine in New Vessels? In *XXVII Meeting of the Italian Political Science Association* (*SISP*), University of Florence, Florence, September 12–14.
Grasso, M.T., and M. Giugni. 2016. Protest Participation and Economic Crisis: The Conditioning Role of Political Opportunities. *European Journal of Political Research* 55: 663–680.
Gurr, T.R. 1970. *Why Men Rebel*. Princeton, NJ: Princeton University Press.
Hall, P. 1999. Social Capital in Britain. *British Journal of Political Science* 29: 417–461.
Hay, C. 2007. *Why We Hate Politics*. Cambridge: Polity Press.
Inglehart, R. 1977. *The Silent Revolution: Changing Values and Political Styles Among Western Publics*. Princeton, NJ: Princeton University Press.
Jahoda, M., P.F. Lazarsfeld, and H. Zeisel. 1933. *Marienthal: The Sociography of an Unemployed Community*. Brunswick, NJ: Transaction Publishers.
Kern, A., S. Marien, and M. Hooghe. 2015. Economic Crisis and Levels of Political Participation in Europe (2002–2010): The Role of Resources and Grievances. *West European Politics* 38: 465–490.
Klandermans, B. 1997. *The Social Psychology of Protest*. Oxford: Blackwell.
Klandermans, B., and D. Oegema. 1987. Potentials, Networks, Motivations, and barriers: Steps Toward Participation in Social Movements. *American Sociological Review* 52: 519–531.
Klandermans, B., J. van Stekelenburg, and J. van der Toorn. 2008. Embeddedness and Identity: How Immigrants Turn Grievances into Action. *American Sociological Review* 73: 992–1012.
Lim, Chaeyoon, and James Laurence. 2015. Doing Good When Times Are Bad: Volunteering Behaviour in Economic Hard Times. *British Journal of Sociology* 66 (2): 319–344.
Lipsky, M. 1968. Protest as a Political Resource. *American Political Science Review* 62: 1144–1158.
McAdam, D. 1982. *Political Process and the Development of Black Insurgency*. Chicago, IL: University of Chicago Press.
McAdam, D. 1986. Recruitment to High Risk Activism: The Case of Freedom Summer. *American Journal of Sociology* 92: 64–90.
McCarthy, J., and M. Zald. 1977. Resource Mobilization and Social Movements: A Partial Theory. *American Journal of Sociology* 82: 1212–1241.

Merton, R. 1957. *Social Theory and Social Structure*. Glencoe, IL: Free Press.
Pattie, C., P. Seyd, and P. Whiteley. 2004. *Citizenship in Britain: Values, Participation and Democracy*. Cambridge: Cambridge University Press.
Paxton, P. 2002. Social Capital and Democracy: An Interdependent Relationship. *American Sociological Review* 67: 254–277.
Pettigrew, T. 2016. In Pursuit of Three Theories: Authoritarianism, Relative Deprivation, and Intergroup Contact. *Annual Review of Psychology* 67: 1–21.
Pharr, S., and R. Putnam (eds.). 2000. *Disaffected Democracies: What's Troubling the Trilateral Countries?*. Princeton, NJ: Princeton University Press.
Putnam, R. 1993. *Making Democracy Work*. Princeton, NJ: Princeton University Press.
Putnam, R.D. 1995. Tuning In, Tuning Out: The Strange Disappearance of Social Capital in America. *PS. Political Science and Politics* 28: 664–683.
Putnam, R. 2000. *Bowling Alone: The Collapse and Revival of American Community*. New York, NY: Simon & Schuster.
Runciman, W. 1966. *Relative Deprivation and Social Justice*. Berkeley, CA: University of California Press.
Rüdig, Wolfgang, and Georgios Karyotis. 2013. Who Protests in Greece? Mass Opposition to Austerity. *British Journal of Political Science*. https://doi.org/10.1017/S0007123413000112.
Saunders, C., M.T. Grasso, C. Olcese, E. Rainsford, and C. Rootes. 2012. Explaining Differential Protest Participation: Novices, Returners, Repeaters and Stalwarts. *Mobilization* 17: 263–280.
Schussman, A., and S. Soule. 2005. Process and Protest: Accounting for Individual Protest Participation. *Social Forces* 84: 1083–1108.
Skocpol, T. 2003. *Diminished Democracy: From Membership to Management in American Civic Life*. Norman, OK: University of Oklahoma Press.
Smith, H., and T. Pettigrew. 2015. Advances in Relative Deprivation Theory and Research. *Social Justice Research* 28: 1–6.
Smith, H., T. Pettigrew, G. Pippin, and S. Bialosiewicz. 2012. Relative Deprivation: A Theoretical and Meta-Analytic Review. *Personality and Social Psychology Review* 16: 203–232.
Snow, D. 2004. Framing Processes, Ideology and Discursive Fields. In *The Blackwell Companion to Social Movements*, ed. D. Snow, S. Soule, and H. Kriesi, 380–412. Oxford: Blackwell.
Stouffer, S., E. Suchman, L. DeVinney, S. Starr, and R. Williams. 1949. *The American Soldier*, vol. 1. Princeton, NJ: Princeton University Press.
Strauss, S. 2008. *Volunteering and Social Inclusion: Interrelations Between Unemployment and Civic Engagement in Germany and Great Britain*. New York: Springer.
Temple, L., and M.T. Grasso. 2017. Austerity, Politics, and Partisanship in the UK. In *Citizens and the Crisis: Perceptions, Experiences, and Responses to the Great Recession in Europe*, ed. M. Giugni, and M.T. Grasso, 29–60. London: Palgrave Macmillan.
Temple, L., M.T. Grasso, B. Buraczynska, S. Karampampas, and P. English. 2016. Neoliberal Narrative in Times of Economic Crisis: A Political Claims Analysis of the UK Press, 2007-2014. *Politics & Policy* 44: 553–576.
Van Deth, J.W. 2014. A Conceptual Map of Political Participation. *Acta Politica* 49: 349–367.
Van Stekelenburg, Jacquelien, and Bert Klandermans. 2013. The Social Psychology of Protest. *Current Sociology* 61 (5–6): 886–905.
Verba, S., N. Burns, and K.L. Schlozman. 1997. Knowing and Caring About Politics: Gender and Political Engagement. *The Journal of Politics* 59: 1051–1072.
Verba, S., N. Nie, and J.-O. Kim. 1978. *Participation and Political Equality*. Cambridge: Cambridge University Press.
Verba, S., K.L. Schlozman, and H. Brady. 1995. *Voice and Equality: Civic Voluntarism in American Politics*. Cambridge, MA: Harvard University Press.
Walker, I., and T. Pettigrew. 1984. Relative Deprivation Theory: An Overview and Conceptual Critique. *British Journal of Social Psychology* 23: 301–310.
Walsh, E.J. 1981. Resource Mobilization and Citizen Protest in Communities Around Three Mile Island. *Social Problems* 29: 1–21.
Zizumbo-Colunga, D., E.J. Zechmeister, and M.A. Seligson. 2010. Social Capital and Economic Crisis in the United States. *American Barometer Insights Series* 43: 1–9.