

# Mobilising IDEAS in the COVID-19 Pandemic: Anti-Lockdown Actions and the Identity-Deprivation-Efficacy-Action-Subjective Well-Being Model

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Supplementary Materials: Data, Materials, Preregistration [see Index of Supplementary Materials]



## Abstract

We tested how well the Identity-Deprivation-Efficacy-Action-Subjective-wellbeing (IDEAS) model predicts citizens' intentions to engage in collective action opposing their government, and their subjective well-being. Representative samples from Scotland, Wales, and the county of Kent in England were surveyed during the COVID-19 pandemic in October 2020 (N = 1,536). Results largely support our preregistered hypotheses, confirming that the IDEAS model offers a valid explanatory framework for how relative deprivation predicts both collective action opposing one's government and levels of subjective well-being. In the case of collective action, there were significant effects of collective relative deprivation (cognitive and affective) and collective efficacy on social change beliefs, which in turn positively predicted collective action intentions. The role of national identification was more nuanced, revealing both negative indirect effects via collective efficacy and relative deprivation, and a positive indirect effect via political orientation. Findings also suggest interesting directions for future research on national identification.

## Keywords

collective action, COVID-19, efficacy, relative deprivation, social identity

## Non-Technical Summary

### Background

In 2020-2021, many governments introduced regulations and restrictions to personal freedom to reduce the spread of COVID-19. Although many people accepted and complied with them, these restrictions also triggered strong reactions amongst others, for example under the form of demonstrations (the so-called “anti-lockdown” protests). Such demonstrations are a form of collective action opposing some citizens to their national government.

### Why was this study done?

Anti-government actions remain understudied and we do not know whether the same psychological mechanisms underpin these and other actions (that focus for example on the perspective of minority group members) or whether specific dynamics apply. This study aimed to investigate this issue further.



**What did the researchers do and find?**

We analysed data collected in the UK during the COVID-19 pandemic that assessed intentions to engage in collective actions challenging pandemic-related restrictive policies implemented by the government. We relied on an existing model of collective action, the “IDEAS” model, and analysed how well the model could predict respondents’ intentions. The IDEAS model stands for Identity, Deprivation, Efficacy, Action, and Subjective Wellbeing. It proposes that the starting point for people to engage in collective action is when they feel their group (but not necessarily themselves personally) is deprived because of the actions of the government. This sense of deprivation should trigger feelings of discrimination and of anger, which then lead to beliefs that social change is necessary. A sense of collective efficacy (that the group of citizens *can* collectively address injustice) and strong group identification also contribute to these beliefs in the necessity of social change. These beliefs finally lead to greater intentions to engage in anti-government collective actions. Our results largely support these predictions of the IDEAS model.

**What do these findings mean?**

The findings help us understand why people might have engaged in anti-government action during the COVID-19 pandemic. Notably, they highlight the central role of collective (but not personal) relative deprivation for engagement in collective action. Understanding the psychological processes underlying someone’s choices and actions is the first step for addressing it. Anti-government actions can sometimes be desirable and beneficial (for example if they oppose a tyrannical government) but sometimes they are not (for example if they threaten the stability of society). These findings point to psychological factors that should either be addressed –if one wants to reduce engagement in anti-government actions– or ignited –if one wants to trigger engagement it.

Engagement in collective action has been a long-standing object of research in psychological and political sciences (Olson, 1971). Psychological models of collective action largely focus on the perspective of minority group members who oppose a symbolic majority or privileged group (Drury & Reicher, 1999; Sidanius, 1993; van Zomeren et al., 2008) and aim to challenge their in-group’s relatively lower status. In comparison, much less work has investigated collective action as a broader movement of members of the general population against their government. In principle, it might be assumed that the same psychological mechanisms underpin collective action regardless of whether it is by a specific minority group or involves a broader group of citizens opposing their governing bodies. However, it could also be argued that specific dynamics (e.g., related to social identity or relative perception of injustice) might not apply similarly in both cases. Indeed, Jost et al. (2017) argued that previous work on collective action might have overlooked some important dynamics because of its focus on in-group/out-group actions and processes.

The aim of the present paper is to test whether the Identity-Deprivation-Efficacy-Action-Subjective well-being (IDEAS) model, a well-established model of collective action previously used to study minority-perspective dynamics (e.g., Abrams et al., 2020), can also account for citizens’ intentions to oppose and protest against their national government. To investigate this question, we draw from data collected during the COVID-19 pandemic that assessed respondents’ intentions to engage in collective actions challenging the restrictive policies implemented in response to the pandemic (including the so-called “anti-lockdown protests”). In the following sections, we give an overview of anti-government actions that occurred during the pandemic, before turning to the description of the IDEAS model, highlighting its specificities as well as its similarities with neighbouring models.

**Anti-Government Actions During the COVID-19 Pandemic**

In 2020–2021, most governments introduced regulations and restrictions to personal freedom in order to reduce the spread of COVID-19 (Reicher & Stott, 2020). Demonstrations and legal challenges to contest these restrictions arose, although others demonstrated to demand more stringent measures (Choma et al., 2021; Pressman & Choi-Fitzpatrick, 2021). At first, most anti-government actions challenged lockdown rules and called for a reopening of the public and economic sector. Later, objections were raised over vaccinations and the introduction of COVID certificates or so-called “vaccine passports”.

In many countries, participation in anti-lockdown actions has been higher amongst conservative or right-wing movements (e.g., Jarynowski, 2022; Sanders, 2020; Schradie, 2020). However, other political groups also participated (including the Green movement and far-left groups, Jarynowski, 2022). Some have noted that protests during the pandemic were rarely about one topic alone (Gerbaudo, 2020) but conveyed a general dissatisfaction towards regulations and mandates (Martin & Vanderslott, 2022), which suggests that some motivations for collective actions were trans-ideological and that different crowds might have mixed during these protests.

Although some demonstrations occurred online, in compliance with social distancing measures, many others happened in the street, and research suggests that protests during the pandemic followed a classic protest repertoire (albeit with some adjustments), not differing qualitatively from protest in “normal” times (Gerbaudo, 2020; Kowalewski, 2021; Pressman & Choi-Fitzpatrick, 2021). In addition to protests, dissatisfied individuals also resorted to other means to challenge governmental measures, including lawsuits and political referendums (Geiser, 2021; Sobel & Musumeci, 2020).

As such, the pandemic provides researchers with a unique opportunity to study the consequences of a state of division between authorities and their public (Reicher & Stott, 2020). We argue that collective action in the context of COVID-19, including protests but also other actions, and challenging lockdowns but also other types of grievances, can be approached as a specific case of *anti-government action*.

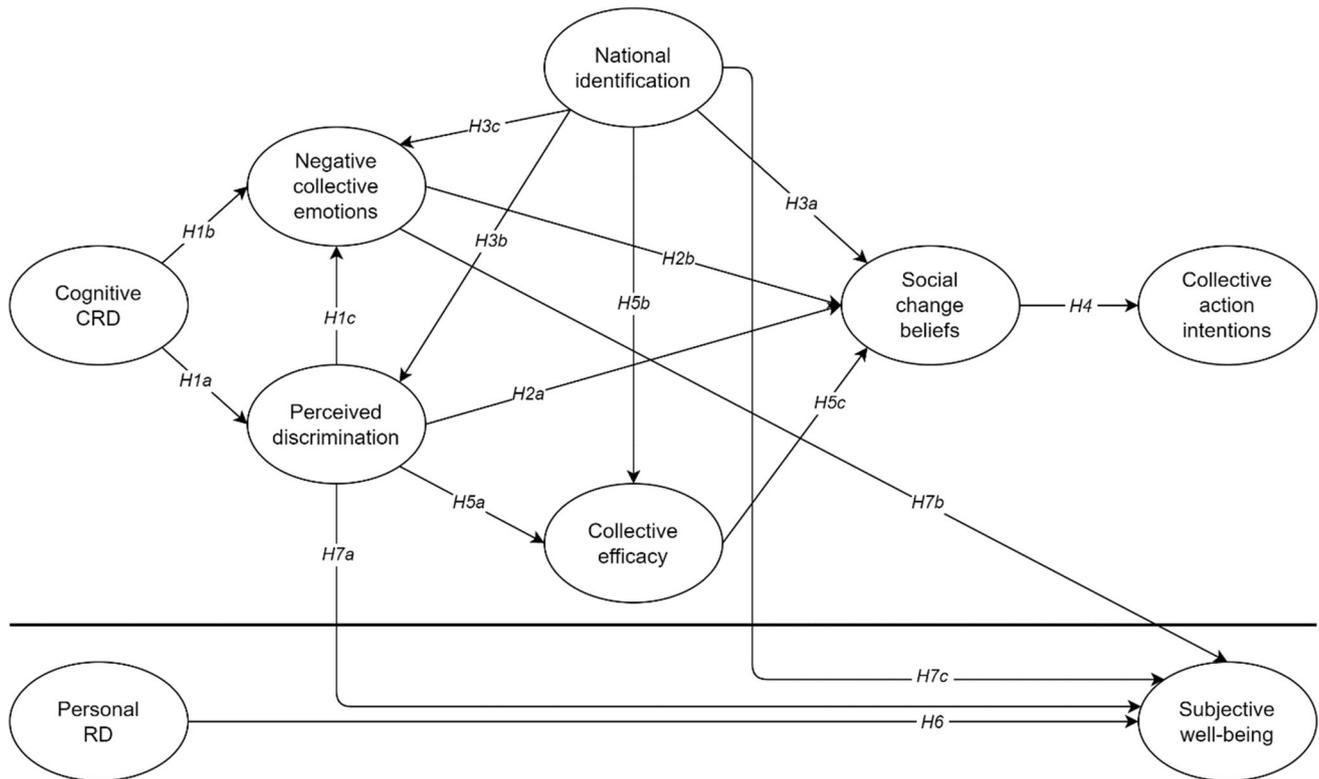
Anti-government actions are by no mean a new phenomenon (Abrams & Dunn, 2017): just in the past decades, they have occurred all around the globe, with aims ranging from policy change to regime change (Choi & Kim, 2019; Tarrow, 2011). They remain, however, relatively less frequent than collective actions aiming to advance the status of specific minority groups (in recent years for example, actions around race, gender, and sexual identity have been particularly salient) which might explain why they are less well studied. Sweetman et al. (2013) similarly note that research on social change has mostly, and too narrowly, focused on one specific type of social change goal (i.e., amelioration of collective grievances). With respect to Sweetman’s typology, anti-government collective action might constitute a *social justice* goal, which differs from an *amelioration* goal because of its greater desired inclusiveness (i.e., it aims “at improving the situation of all or most groups within the social system”, Sweetman et al., 2013, p. 300). Interestingly, this means that collective action might be perceived as benefiting the broader national group even if activists come predominantly from one political group. Given these distinctions, the question remains as to whether, and how well, established psychological models of collective action can account for individuals’ willingness to oppose government regulations, such as during the COVID-19 pandemic.

## The Identity-Deprivation-Efficacy-Action-Subjective Well-Being (IDEAS) Model

The IDEAS model (Abrams et al., 2020) is a development of the earlier Social Identity-Relative Deprivation model (SIRD, Abrams & Grant, 2012) and SIRDE model (SIRD plus Efficacy, Grant et al., 2015; Grant et al., 2017). The IDEAS model builds on three prominent frameworks of intergroup relations research: *relative deprivation* theory, *social identity* theory, and *resource mobilisation* theory. It aims to combine and extend those to better distinguish the implications of the psychological constructs considered at the social versus personal level. Distinct from various other models of collective action, the IDEAS model places social change beliefs as a key proximal mediator of action intentions, and it also addresses the implications of deprivation and identification for subjective well-being, thereby linking both the personal and social levels. This is particularly pertinent to situations where there might be significant personal stressors (e.g., fear of COVID-19, family pressures, isolation, Wright et al., 2022). To date, the SIRD(E) and IDEAS models have been used to investigate collective action by minority group members (including disadvantaged skilled immigrants in Canada, Grant et al., 2015; and Scottish citizens supporting independence from the United Kingdom, Abrams & Grant, 2012; Abrams et al., 2020; Grant et al., 2017). As we will argue here, a further suitable test of the model is its ability to predict collective action by a broader group of citizens against their government. The overall model with numbered hypotheses is summarised in Figure 1.

Figure 1

The Identity-Deprivation-Efficacy-Action-Subjective Well-Being (IDEAS) Model, Predicting Collective Action Intentions and Subjective Well-Being



Note. CRD = collective relative deprivation. RD = relative deprivation.

## Relative Deprivation

The starting point of the IDEAS model is relative deprivation (RD). RD is “a judgment that one or one’s in-group is disadvantaged compared to a relevant referent, [which] invokes feelings of anger, resentment, and entitlement” (Smith & Pettigrew, 2015, p. 2). Relative deprivation theory distinguishes between perceptions at the personal and the group level (Olson et al., 1986; Smith et al., 2012). *Personal* relative deprivation (PRD), or the sense of being personally less well off than similar others, has been linked to outcomes at the personal level including subjective well-being (Abrams et al., 2020; Crosby, 1976). In contrast, *collective* relative deprivation (CRD), that is, the sense that one’s *group* is collectively (and unjustly) deprived relative to an out-group (Runciman, 1966) is mostly related to group-based outcomes (Zubielevitch et al., 2020; see also Jenkins et al., 2008).

CRD has a cognitive and an affective component. The cognitive aspect is the belief or perception that the in-group is disadvantaged. The affective aspect encompasses the negative emotions triggered by this belief, most importantly anger and frustration. These affects are conceived as part of the coping response, whereby the individual perceives an external entity or group as responsible for the unfair situation. This experience of group-based anger, in turn, fuels involvement in collective action to challenge the perceived injustice (Goldenberg et al., 2016; Grant, 2008; Grant & Smith, 2021; Lüders et al., 2021; see also van Zomeren et al., 2008). A meta-analysis of the relative deprivation literature showed that affective relative deprivation indeed mediates the effect of cognitive affective deprivation (Smith et al., 2012).

Importantly for the present research, relative deprivation is not only assessed by comparing with an out-group, but also with respect to one’s own group across time, that is, a *temporal* comparison. Perceptions that the group will be less well off in the future compared to the present time can hence lead to temporal collective relative deprivation (Albert, 1977; Crosby, 1976), especially in times of rapid social change (De La Sablonnière & Tougas, 2008; De La Sablonnière et

al., 2009). In the context of COVID-19, people might feel relatively deprived if they consider that their living standards are falling because of their government's handling of the pandemic. We therefore proposed the following hypotheses:

*Cognitive and affective CRD (H1):* the more one thinks that people in the UK are becoming less well off as a consequence of the government's actions during the pandemic (cognitive CRD), the more one believes that people in the UK are collectively being discriminated against by the government (1a) and the more they experience anger and frustration (1b). In addition, the two elements of affective CRD are related such that perceived discrimination increases the levels of anger and frustration (1c).

## Social Identity

Social identity theory (Tajfel & Turner, 1986) proposes that intergroup social comparisons (in-group vs. out-group) are central to the meaning and value of group membership, from which one derives a collective self-concept (Hogg & Abrams, 1988). When the comparison is unfavourable, a range of strategies allow to protect and enhance the self-concept, including—if the group's low status is perceived as illegitimate—engaging in collective action.

In general terms, the strength of a given social identity is thus positively associated with the extent to which people act on behalf of their in-group. More specifically, in-group identification predicts engagement in collective action aiming to improve the group's low status. For example, a meta-analysis of the social identity model of collective action (SIMCA) found that group identity positively predicts involvement in collective action, both directly and indirectly through affective injustice (van Zomeren et al., 2008). Consistent with these findings, others have argued that a strong group identity makes people more likely to care about the fairness of the group's status and to favour collective action over other strategies (such as joining another group; Abrams et al., 1999). A stronger identity also elicits greater outrage at the situation and greater willingness to address it (Abrams & Grant, 2012; Kawakami & Dion, 1995) as well as greater group efficacy beliefs (Blackwood & Louis, 2012).

Most studies relying on such group-based “non-politicised” identity focus on an intermediate level of self-categorisation, that is, identification with one's low-status minority group. In the broader context of citizens engaging collectively against their government, however, non-politicised identification seems best captured as the national level. Indeed, the focus on the (national) government should make identity at the same level more salient and more relevant to predict collective action against this very same national government (see Jetten et al., 2020). This could be especially so in the context of COVID-19, where collective actions were taken to protest restrictions of freedom (imposed on all citizens), which affected not only individual lifestyle but also core national values (Lampert et al., 2021). Moreover, nations worldwide called for citizens' solidarity within the nation, de facto framing measures and opposition to them as a national identity concern. Indeed, previous research confirms the implication of national identity on attitudes towards restriction measures although results are mixed. Some suggest a positive link between national identification and support for restrictive measures (e.g., Marinthe et al., 2022; Van Bavel et al., 2022), while others suggest that national attachment may be related to more collective actions *against* the same measures (Peacock & Biernat, 2022).

In a similar vein and more broadly, Sweetman's typology of social change goals suggests that inclusive goals (such as the social justice goals category, in which anti-government collective action fits) are supported by a wider definition of who constitutes the “we”, and a self-categorisation at a superordinate level of social identity, such as the national level (Sweetman et al., 2013).

Yet, the connection between minority group identification and engaging in pro-minority collective action might be conceptually different from that between national identification and engaging in anti-government actions. Indeed, engaging in anti-government actions triggers an identity dilemma: the same group that is the object of concern (the nation) is also the one against whose leadership the collective action is directed. The literature suggests that a common national identity is important for the development and stability of democracy (Easton, 1975), and national identification is typically associated with greater political trust (Berg & Hjerm, 2010) and through this to lesser engagement in anti-government actions (Jenkins et al., 2008). Thus, to be supported by high identifiers, such actions must be conceived as a form of *normative dissent* (Packer, 2008) in that criticism of the group is intended to improve the group's situation rather than to undermine it (see also Jiménez-Moya et al., 2017; Sekerdej & Roccas, 2016). This dilemma suggests that

national identification could simultaneously contribute both positively and negatively to collective action intentions, an issue we discuss in greater detail later.

To the extent that group identity fulfils the same role for intergroup-focused and for nation-focused anti-government actions, then stronger national identity should increase intentions to oppose the government's actions, both directly and indirectly through an increased perception of discrimination and collective efficacy, and a greater elicitation of anger and frustration (hypotheses are spelled out below). However, as outlined above, whether this direct translation of hypotheses should be applied remains an open empirical question.

### Social Change Beliefs

A distinctive feature of the IDEAS model is the *social change beliefs* component (see Abrams & Grant, 2012), embodying a central proposition from social identity theory that members of a disadvantaged group will only take part in collective action if they believe that existing social control systems do not allow scope for improving their collective situation (Abrams et al., 2020; Grant et al., 2017). Such social change beliefs refer to "individuals' beliefs that radical change is necessary to improve the group's standing" (Travaglino et al., 2017, p. 320) and mostly develop when the group's status is perceived as illegitimate but stable, justifying radical collective action (Tajfel & Turner, 1979). Specifically, the IDEAS model proposes that under such circumstances, affective CRD and social identity together "provide the foundation for the development of social change beliefs or ideology, which are then the proximal predictor of intentions to support radical change to the existing social structure" (Abrams et al., 2020, p. 429). Social change beliefs then act as the key mediator of these other variables (Abrams & Grant, 2012; Grant et al., 2015). Importantly, social change beliefs are distinct from perceived collective efficacy: efficacy (see below) refers to the perception of collective action as efficient and potent, whilst social change beliefs represent its perceived necessity and urgency. In expectancy-value terms (Stürmer & Simon, 2004, 2009), social change beliefs are closer to the value component, and efficacy is closer to the expectancy component.

In the context of citizens engaging collectively against their government, social change beliefs seem equally important: people would only engage in collective action if they believe that eliminating the unjust treatment (discrimination) they endure due to government actions will require a significant shift in policy. When the government has a large majority and a future general election is some years distant (as in the UK at the time of this research), people may infer that the necessary change may only be achieved through radical action such as protesting or filing a lawsuit to stimulate a change of government policy (as distinct from quietly waiting for the next election to enable a change of government). The following hypotheses ensue:

*Relative deprivation hypothesis (H2):* higher levels of both perceived discrimination (2a) and negative intergroup emotions (2b) lead to greater social change beliefs (hence mediating the effect of cognitive CRD on social change beliefs).

*Social identification hypothesis (H3):* national identification should be related to social change beliefs and collective action intentions. Specifically, people who identify more strongly with the national group should care more about the fairness of the group's status and react more strongly to unfairness, therefore supporting more radical action to address the unfairness (Jiménez-Moya et al., 2017; Packer, 2008): they would therefore report stronger social change beliefs (3a). In addition, we expect indirect effects of national identification through affective CRD, such that high identifiers are more likely to perceive the national group as being discriminated against by the government's actions (3b) and to experience negative intergroup emotions (3c; see also van Zomeren, Leach, et al., 2012; van Zomeren et al., 2008).

*Social change beliefs hypothesis (H4):* social change beliefs is the stronger predictor of collective action intentions, mediating the effect of identification, affective CRD, and collective efficacy (see below).

## Perceived Collective Efficacy

Distinct from the concept of whether social change is necessary (social change beliefs), collective efficacy represents the belief that the group's actions *can* effect positive change. It features in various models including SIMCA (van Zomeren, Leach, et al., 2012; van Zomeren et al., 2008) and dual-pathway models (Stürmer & Simon, 2004). Similar to other models, the IDEAS model posits that collective efficacy should facilitate engagement in collective action (Abrams et al., 2020; Grant et al., 2015).

Aspects of the situation also influence levels of perceived collective efficacy. Most notably, stronger identification with the group is believed to lead to a greater sense of collective efficacy, as a result of the stronger sense of connection and unity with other group members (Abrams et al., 2020; Blackwood & Louis, 2012). In addition, the IDEAS model suggests that perceptions of higher levels of discrimination may lead people to anticipate greater efficacy. The rationale is as follows: individual actions to combat systemic discrimination, such as that imposed by governmental bodies, are usually costly and unsuccessful. Realising this, discriminated group members might contrast individual action and collective action, and come to believe that social change will be more likely if they work together as a group, rather than as individuals (Grant et al., 2015). In other words, "group members who perceive more discrimination may conclude that [only] collective action may resolve the situation" (Abrams et al., 2020, p. 430). However, evidence for this possibility remains rather mixed (Grant et al., 2015; Grant et al., 2017). We therefore propose the following hypotheses:

*Collective efficacy hypothesis (H5):* perceived discrimination (5a) and national identification (5b) positively influence collective efficacy. Collective efficacy, in turn, is associated with stronger social change beliefs (5c).

## Subjective Well-Being

Social identity theory holds that collective behaviour is motivated in part by a desire to sustain or improve a positive social identity. Thus, social identity and involvement in collective activity should be related to subjective well-being (Drury & Reicher, 1999; Jetten et al., 2012; Stott et al., 2018). A central proposition of social identity theory is that collective and individual identities are distinct and have separate psychological pathways. It has long been acknowledged that *personal* relative deprivation is likely to lead to lower subjective well-being (Crosby, 1976). The IDEAS model posits that while collective action intentions are an important outcome of RD and identification, there should also be ramifications for subjective well-being. Moreover, recognising that lived experience combines both personal and collective factors, the model proposes that subjective well-being is associated with both personal and collective social comparisons but that these relationships are nuanced. Specifically, an affective crossover effect means that collective relative deprivation can also impact well-being (Abrams et al., 2020) with counteracting effects.

A *negative* effect arises because people who perceive their group as being discriminated against and who experience anger and frustration as a result are more likely to report lower levels of well-being (Pascoe & Smart Richman, 2009; Schmitt et al., 2014). Because it increases the perception of group discrimination and negative emotions, identity might therefore have a negative indirect relationship to well-being, although evidence for this relationship is mixed (Schmitt et al., 2014; Sellers & Shelton, 2003).

However, other models argue in favour of a *positive* link between identification and well-being (notably the rejection-identification model, Branscombe et al., 1999; and the social cure model, Jetten et al., 2012): the social meaning and solidarity arising from group identity could bolster well-being. Combining these two approaches, the IDEAS model posits that CRD has both positive and negative effects on well-being, in combination with social identity (Abrams et al., 2020; Grant et al., 2017). The following hypotheses ensue:

*Personal deprivation hypothesis (H6):* personal relative deprivation is negatively associated with subjective well-being. Affective collective relative deprivation (discrimination and negative inter-group emotions) is also negatively related to well-being (H7a & H7b). On the other hand, national identification is positively related to well-being (H7c). Finally, personal relative deprivation is not expected to influence social change beliefs nor collective action intentions, as they refer to different

levels of the self-concept (personal versus collective, respectively, Abrams et al., 2020; see also McVeigh & Smith, 1999; Solt, 2015).

## IDEAS: Specificities and Similarities With Other Models of Collective Action

As we noted earlier, the IDEAS model was developed as an integrative model building on a combination of three pivotal frameworks: relative deprivation theory, social identity theory, and resource mobilisation theory. Research supporting the model has demonstrated distinct effects of its different components (Abrams & Grant, 2012; Abrams et al., 2020; Grant et al., 2015; Grant et al., 2017). Some other integrative models of collective action share a similar approach. In this section we briefly note the similarities and the specificities of the IDEAS model compared to these other models.

First, the IDEAS model includes some components found in other models. In particular, collective efficacy is – under various forms – recognised as a key predictor in a number of different frameworks. It is conceptualised as collective efficacy in the Social Identity Model of Collective Action (SIMCA, van Zomeren, 2013, 2016), empowerment in the Elaborated Social Identity Model (ESIM, Drury & Reicher, 1999, 2009), or as contributing to the expectancy component of the cost-benefit calculation process in the dual-pathway model of collective action (Stürmer & Simon, 2004, 2009). Social identity is also central in many models, including the SIMCA, ESIM and dual-pathway models. The level at which identity is considered, however, may vary. Early work with the SIMCA focused on identification with the minority group (a “non-politicised” identity) before shifting to identification with the movement itself (“politicised identity”, see van Zomeren et al., 2008). Work on the dual-pathway model similarly tends to focus on politicised identities (Simon & Klandermans, 2001; Stürmer & Simon, 2004). However, others continue to emphasise the importance of group identification (e.g., Jiménez-Moya et al., 2017; Thomas et al., 2020). The IDEAS model also concentrates on group-based, non-politicised identity.

Second, the IDEAS model features components that are much less prominent elsewhere. Whilst the notion of relative deprivation is also shared with other models, many focus solely on the negative emotion subcomponent. Moreover, the IDEAS model embraces both personal and collective, and distinguishes between cognitive and affective relative deprivation. Recent operationalisations also decompose the latter into discrimination beliefs and group-related negative emotions. The SIMCA mostly conceptualises perceived injustice through group-based anger (van Zomeren, 2013, 2016), although the role of this “emotional route to protest” has sometimes been criticised (Stürmer & Simon, 2009). The more refined conceptualisation of RD as encompassing cognitive RD, discrimination beliefs, and group-based affects, thus distinguishes the IDEAS model from other models. Further, the emphasis on social change beliefs is the most critical component of the IDEAS model, and does not feature in the SIMCA, ESIM, or the dual-pathway models. It does, however, share characteristics with other components highlighted in specific pieces of work. As we noted earlier, social change beliefs, though based on the original formulation of social identity theory (Tajfel & Turner, 1979), are also implied in more recent concepts such as normative dissent (Packer, 2008), reflecting the idea that change of direction is a prerequisite to improve the group’s situation. It also embraces perceived legitimacy of collective action, as being the ‘right’ and necessary thing to do regardless of its perceived effectiveness (Jiménez-Moya et al., 2019; see also Drury & Reicher, 1999).

Finally, other models feature some components that are absent from the IDEAS model, especially at the individual level. For example, it does not include variables related to general values or morality, such as the integration of moral convictions in more recent versions of the SIMCA (van Zomeren, 2013, 2016; van Zomeren, Postmes, et al., 2012), or other work on moral foundations (Milesi & Alberici, 2018) and system justification (Jost et al., 2017; Osborne et al., 2019). The affective component of the IDEAS model focuses on the discrete emotion of anger arising from relative deprivation, and does not address other emotions. Nor does it distinguish between group-based and system-based anger (Jost et al., 2017; Osborne et al., 2019). Various frameworks that consider emotions in politics recognise the role of emotions such as hope (or enthusiasm, e.g., Jarymowicz & Bar-Tal, 2006; Włodarczyk et al., 2017) and fear (Albertson & Gadarian, 2015; Marcus et al., 2019; Vasilopoulos et al., 2022). However, across contexts anger emerges as the most systematic predictor of mobilisation (Valentino et al., 2011; see also Brader & Marcus, 2013; Marcus, 2000, 2003). Thus, both to retain the model’s coherence and to avoid overreaching into multiple extensions and specificities, the IDEAS model is restricted to the emotions most likely to arise from relative deprivation.

## Method

### Participants and Procedure

The present data are part of a large-scale research project aiming to track social cohesion in the UK during COVID-19 (Abrams, Broadwood, et al., 2021). The survey assessed the views of a representative panel from respondents in the UK regarding the current political situation, social cohesion, political views, and views on COVID-19.<sup>1</sup> Participants were drawn from the general population of the regions of Scotland and Wales as well as the county of Kent in England. These areas were chosen because of their disparities in terms of demographics, political preferences, and history—so that considering them together would provide a comprehensive overview of citizens' perceptions in the UK. An external research partner (Qualtrics Panels) distributed the online survey, recruiting and remunerating the participants directly. Data were collected between 7 and 27 October 2020, when the UK authorities were discussing the need for a second national lockdown, triggering important anti-lockdown protests (Gayle, 2020). For context, a brief timeline of the evolution of government measures is provided in [Electronic Supplementary Material \(ESM1\)](#).

A total of 1,536 respondents (50.8% male,  $M_{\text{age}} = 44.12$ ,  $SD = 16.54$ ; all demographics, for the total sample and for each regional subsample, are reported in ESM2) completed the online questionnaire. We determined sample size prior to data collection based on feasibility and funding capacities. In addition, the design of the study, hypotheses, sample size, and rules for participants exclusions were preregistered (see [Supplementary Materials](#)).<sup>2</sup> The preregistration also includes the items developed for and used in the study although, as we detail below, final analyses discarded three of the initially planned items.<sup>3</sup>

Alongside other measures that are part of separate projects, participants completed measures for cognitive and affective collective relative deprivation, perceived discrimination, intergroup emotions, national identification, collective efficacy, social change beliefs, and collective action intentions, as well as personal relative deprivation and subjective well-being. Participants also reported their political orientation (1 = *Left*, 7 = *Right*,  $M = 3.50$ ,  $SD = 1.45$ ). Zero-order correlations between all constructs are reported in [Table 1](#). All data as well as code for the analyses are publicly available on the OSF page dedicated to the project (see [Supplementary Materials](#)).

### Materials

Most items were drawn and adapted from previous research on the IDEAS model (Abrams et al., 2020; Grant et al., 2017). Where possible, constructs were operationalised as latent variables in structural equation modelling.<sup>4</sup> For ease of interpretation, we also report reliability coefficients for composite scores which were created by averaging the items in each scale. The composite scores were also used to calculate the correlations amongst variables in [Table 1](#). Items and scaling are shown in ESM3 alongside a complete correlation table (ESM4). Multi-item measures were as follows: Cognitive CRD (three items), Negative Collective Emotions (two items), National Identification (two items), Collective Efficacy (two items), Social Change Beliefs (two items), Collective Action Intentions (three items), and Subjective

1) Comparisons with the official 2011 Census data confirmed the present sample is representative in terms of gender and age, except for a slight underrepresentation of 75+ year old respondents (3.3% here versus 10.2% in the general population). All other age bands were represented appropriately. The sample is also representative in terms of ethnicity (89.9% White/White British versus 87.1%) and annual household income, with a slight overrepresentation of the lowest income band (less than £15,000: 15.5% versus 10.7% in the financial year ending 2020) compensated by a slight overrepresentation of the second lowest band (£15,000 to £30,000: 25.8% versus 39.7%); all following income bands were appropriately represented.

2) Specifically, we aimed to recruit  $N = 1,500$ . Participants who failed to answer correctly to an attention check, and participants who completed the questionnaire in too short a time, were excluded from the sample. Exclusions were handled by our partner Qualtrics Panel who determined the criteria for "too quick answers" based on the times distribution of the first dozens of participants. Exclusions were made on a rolling basis so that the final sample size matched the expected sample size.

3) Due to an unfortunate error of omission, items for social change beliefs also do not appear in the preregistered document.

4) Although having three observed indicators for each latent variable is often preferable, it is still possible and valid to test a model with latent variables composed of two observed variables, as long as the two items are strongly intercorrelated (Worthington & Whittaker, 2006; Yong & Pearce, 2013) and both items also correlate with a third indicator of another construct (Kenny, 2012), ensuring measurement model identification.

Table 1

Zero-Order Correlations Between all Constructs

Constructs	2	3	4	5	6	7	8	9	10
1. Cognitive CRD	.39***	.10***	.01	-.15***	.09***	.08**	-.08**	-.22***	-.23***
2. Negative emotions	–	.14***	-.05*	-.15***	.21***	.26***	-.06*	-.29***	-.22***
3. Perceived discrimination		–	-.00	.07**	.61***	.49***	.03	.00	.10***
4. Collective efficacy			–	.10***	.06*	.04	.05*	.11***	-.13***
5. National identification				–	-.06*	-.01	.16***	.18***	.33***
6. Social change beliefs					–	.67***	.02	-.04	.02
7. Collective action intentions						–	.02	-.05*	.11***
8. PRD							–	.43***	.12***
9. Well-being								–	.18***
10. Political orientation									–

Note. CRD = Collective Relative Deprivation; PRD = Personal Relative Deprivation.

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

Well-being (two items). Collective Action Intentions encompassed three different actions: protesting against COVID-19 restrictions (Item 1), signing a petition (Item 2), and supporting a lawsuit challenging the government policies (Item 3).

Single item measures were used for Political Orientation, Perceived Discrimination, and Personal Relative Deprivation. Measures for perceived discrimination and social change beliefs were initially designed as three-item measures, but later considerations about their interpretation led us to discard three items (two for perceived discrimination and one for social change beliefs). Details of this decision, which we acknowledge as a deviation from preregistration, are developed in a note.<sup>5</sup>

## Results

### Analytical Strategy

We used structural equation modelling to assess the adequacy of the theoretical model. Analyses were conducted in R with the *lavaan* package (Rosseel, 2012) and used case-wise (or ‘full information’) maximum likelihood estimation, including the measurement model (i.e., definition of the latent variables) and the structural model. To assess the model fit, we adopted a ‘2-index presentation strategy’ in order to minimise both Type I and Type II errors (Hu & Bentler, 1999) and reported Root Mean Square Error of Approximation (RMSEA; Steiger & Lind, 1980; see also Diamantopoulos & Siguaw, 2000) and Standardised Root Mean Residual (SRMR; Bentler, 1995). We also report Comparative Fit Index

5) For *Perceived Discrimination*, we initially developed three items which included, “Given the aim to suppress the virus nationally, to what extent do you think the restrictions in the area where you live are justified? Do you think they are: (1 = Unjustifiably too lenient, 7 = Unjustifiably too strict),” and “Overall, do you think the government actions have increased or decreased people’s well-being? (1 = Greatly increased, 7 = Greatly decreased).” However, the first item could be considered problematic as it is confounded with the perception of legitimacy of the government and might not clearly measure discrimination. Similarly, the second item might be confounded with people’s sense of well-being. The third item (“The current government restrictions impede people’s rights and freedom”) thus seemed to be the best indicator of perceived discrimination. Discrimination is often defined when comparing how different people are treated based on a salient characteristic. However, it can also be conceived as a within-comparison made through time. The item directly refers to the unfair treatment that is discrimination (“impede people’s rights and freedom”) and also mentions the temporal element (“current restrictions”). We hence revised the model and analyses to use only this last item to represent Perceived discrimination with the expectation that this closer alignment with the intended constructs should yield clearer but still confirmatory findings. For *Social Change Beliefs*, we initially developed one additional item, “In the long run, the lockdowns will have caused more harm than the virus.” However, in contrast with the first two items which clearly refer to what should be done and whether participants think a desired change could only be attained through extreme forms of action, this ‘harm’ item mixes something of need for social change and perception of the lockdowns as harmful, which is conceptually fairly close to the abovementioned construct of Perceived discrimination. To avoid a confusion of constructs, we therefore decided to discard this third item and retain only the first two.

(CFI; Bentler, 1990) and chi-square. Typically,  $CFI \geq 0.90$ ,  $RMSEA \leq 0.08$ , and  $SRMR \leq 0.09$  indicate an acceptable fit (MacCallum et al., 1996). Following recent recommendations (Yzerbyt et al., 2018), we relied on a bootstrap resampling method to examine the magnitude of indirect effects (percentile bootstrap confidence intervals).

In an initial test, the model was unable to converge due to a negative variance of one collective efficacy item in the latent model. Therefore, we relied on the aggregated mean score of collective efficacy in lieu of the latent factor. In addition, we explored modification indices for suggested modifications to the model. The largest modification index proposed to add a covariance between political orientation and the national identification latent score, which significantly improved the model fit, so we introduced this covariance to the final model (see e.g., Liu et al., 2021; Moscato et al., 2021; Verkuyten et al., 2022), noting this last addition was not preregistered.<sup>6</sup> No further modification was suggested by modification indices that would make theoretical sense.

## Structural Equation Modelling Results

Detailed outputs, including the measurement model, are reported in ESM5. Overall, the model showed satisfactory fit,  $\chi^2(119) = 632$ ,  $CFI = .958$ ,  $RMSEA = .053$ , 90% CI [.049, .057],  $SRMR = .057$ , and 12 of the 16 hypothesised paths were unambiguously and significantly supported (see Figure 2). The main analysis was conducted on the full sample. In follow-up tests, we conducted a multiple-group CFA to assess measurement (in)variance across the three regional samples (i.e., England, Scotland, and Wales; the full output is reported in ESM6). Analyses supported full configural invariance, full metric invariance, full scalar invariance, and strict invariance. In other words, results from the IDEAS model were strictly similar in all three subsamples.

### Preregistered Hypotheses

Considering the *social change beliefs hypothesis (H4)* first, social change beliefs were a very substantial and significant predictor of collective action intentions,  $b = .42$ ,  $SE = .018$ ,  $p < .001$ .<sup>7</sup> As predicted, relationships between other variables and collective action intentions were mediated by social change beliefs. Adding direct paths from identification, discrimination, and collective efficacy to intentions did not improve the model fit (nor were any of these paths suggested by modification indices). Only a direct effect through negative emotions remained.<sup>8</sup> Together, other variables in the model accounted for a substantial portion of the variance in social change beliefs,  $R^2 = .51$ ,  $p < .001$ .

Turning to the *cognitive and affective CRD hypothesis (H1)*, respondents who felt that the country would be facing greater deprivation in the near future (cognitive CRD) were more likely to believe that the government was impeding people's freedom and well-being (perceived discrimination; 1a),  $b = .33$ ,  $SE = .081$ ,  $p < .001$ , and felt angrier and more frustrated (negative collective emotions; 1b),  $b = .76$ ,  $SE = .054$ ,  $p < .001$ . Perceived discrimination and negative emotions were also positively related to one another (1c),  $b = .07$ ,  $SE = .016$ ,  $p < .001$ . More importantly, supporting the *relative deprivation hypothesis (H2)*, stronger social change beliefs were reported by respondents who perceived higher discrimination (2a),  $b = .54$ ,  $SE = .021$ ,  $p < .001$ , and who felt more negative collective emotions (2b),  $b = .26$ ,  $SE = .035$ ,  $p < .001$ . The indirect effect of cognitive CRD on social change beliefs through perceived discrimination was also significant (i.e., the bootstrapped 95% confidence intervals for the indirect effect did not include zero),  $b = .18$ ,  $SE = .045$ , 95% CI [.09, .26], as was its indirect effect through negative emotions,  $b = .20$ ,  $SE = .029$ , 95% CI [.14, .26].

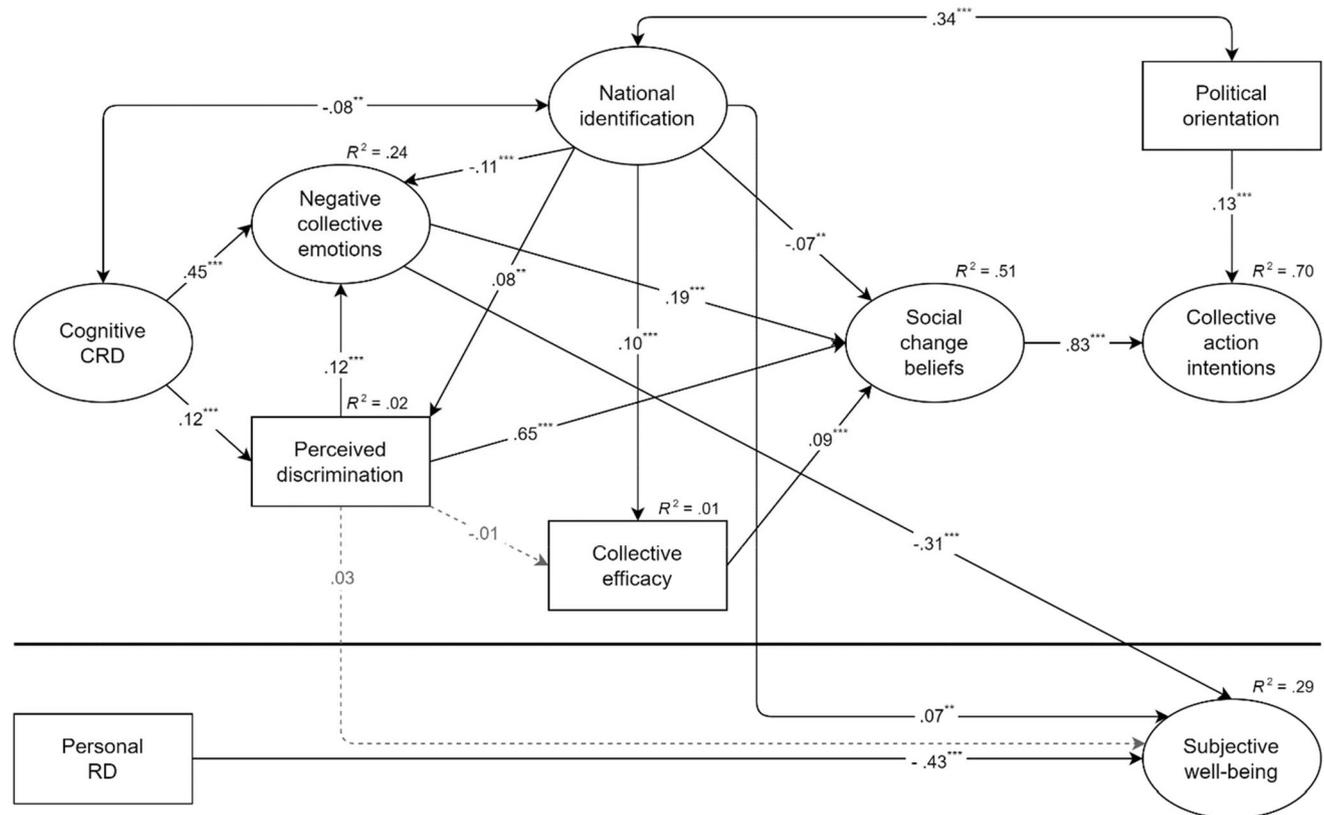
6) For information purposes, the fit of the original model (before adding the covariance between political orientation and the latent score of national identification;  $MI = 150$ ) was:  $\chi^2(119) = 773$ ,  $CFI = .947$ ,  $RMSEA = .060$ , 90% CI [.056, .064],  $SRMR = .064$ .

7) Given the strong link between social change beliefs (SCB) and collective action intentions, one could wonder whether the items actually represent two separate constructs or one single measure of attitude-intention towards protests. We used CFA to compare the fit of two alternative models: one considering SCB and intentions as two separate (correlated) factors, and one considering them as one factor. The two-construct model,  $\chi^2(4) = 15.7$ ,  $CFI = .997$ ,  $RMSEA = .044$ , 90% CI [.022, .067],  $SRMR = .011$ , yielded a significantly better fit than the single-construct model,  $\chi^2(5) = 154.0$ ,  $CFI = .958$ ,  $RMSEA = .139$ , 90% CI [.121, .158],  $SRMR = .036$ ,  $\Delta\chi^2(\Delta df) = 138.3(1)$ ,  $p < .001$ . Hence, results supported the representation of SCB and intentions as separate constructs.

8) Model fit when including the direct paths from identity, negative emotions, discrimination, and collective efficacy to collective action intentions was:  $\chi^2(115) = 599$ ,  $CFI = .961$ ,  $RMSEA = .052$ , 90% CI [.048, .057],  $SRMR = .057$ . The direct path from negative emotions was significant,  $b = .08$ ,  $SE = .018$ ,  $p < .001$ . Other paths were not significant,  $p_s > .072$ .

Figure 2

Structural Equation Model Testing the IDEAS Model on Collective Action Intentions



Note. Numbers reported are standardised coefficients. Dashed lines represent nonsignificant paths. Explained variance of each construct is reported ( $R^2$ ). CRD = collective relative deprivation. RD = relative deprivation.

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

As for the *collective efficacy hypothesis* (H5), higher collective efficacy was associated with stronger social change beliefs (H5c),  $b = .14$ ,  $SE = .033$ ,  $p < .001$ . Collective efficacy was also positively related with national identification (H5b),  $b = .08$ ,  $SE = .021$ ,  $p < .001$ . However, the relationship between perceived discrimination and collective efficacy was not significant (H5a),  $b = -.01$ ,  $SE = .014$ ,  $p = .74$ .

*National identification* (H3) had been expected to relate to collective deprivation. In accordance with the hypothesis, national identification was positively related with perceived discrimination (H3b),  $b = .13$ ,  $SE = .039$ ,  $p = .002$ . Unexpectedly, however, it was *negatively* related with negative emotions (H3c),  $b = -.10$ ,  $SE = .025$ ,  $p < .001$ . Contrary to hypothesis, national identification was also *negatively* related to social change beliefs (H3a),  $b = -.09$ ,  $SE = .028$ ,  $p = .001$ . Further investigation of the indirect effects of national identification on social change beliefs revealed a significant and positive indirect effect through perceived discrimination,  $b = .07$ ,  $SE = .022$ , 95% CI [.03, .11], as well as through collective efficacy,  $b = .01$ ,  $SE = .004$ , 95% CI [.003, .02], and a significant but *negative* indirect effect through negative emotions,  $b = -.03$ ,  $SE = .007$ , 95% CI [-.04, -.01]. Summed with the negative direct effect reported above, these resulted in a non-significant total effect of national identification on social change beliefs,  $b = -.04$ ,  $SE = .035$ , 95% CI [-.11, .03].

Finally, considering the effects on well-being, the different predictors explained a significant proportion of variance of well-being,  $R^2 = .29$ ,  $p < .001$ . Specifically, and supporting the *personal deprivation hypothesis* (H6), higher personal relative deprivation was associated with lower subjective well-being,  $b = -.46$ ,  $SE = .026$ ,  $p < .001$ , but not with other constructs at the collective level.<sup>9</sup> Consistent with the *affective crossover hypothesis* (H7b), there was a negative

relationship between negative emotions and well-being,  $b = -.28$ ,  $SE = .027$ ,  $p < .001$ . The expected link between perceived discrimination and well-being, however, was not significant ( $H7a$ ),  $b = .02$ ,  $SE = .013$ ,  $p = .22$ . Finally, the expected positive relationship with national identification ( $H7c$ ) was significant,  $b = .06$ ,  $SE = .020$ ,  $p = .003$ .

### Exploratory Analyses: Political Orientation

We did not preregister the inclusion of political orientation in the model. However, given the highly political nature of the outcomes considered, and previous research showing the prevalence of such collective actions amongst the right wing, we decided to explore its relationship with collective action intentions. Results showed a positive relationship, such that more right-wing respondents reported stronger intentions,  $b = .10$ ,  $SE = .015$ ,  $p < .001$ . In accordance with the suggested modification indices, political orientation was also positively related to national identification,  $b = .39$ ,  $SE = .034$ ,  $p < .001$  (right-wing respondents reporting stronger national identification).<sup>10</sup>

## Discussion

This study tested the Identity-Deprivation-Efficacy-Action-Subjective well-being (IDEAS) model (Abrams et al., 2020) in the context of anti-government collective action. We conducted a cross-sectional survey amongst the UK population in November 2020, while the UK government was reimplementing local lockdowns to tackle the spread of the COVID-19 pandemic. A structural equation model tested whether respondents' sense of collective relative deprivation (cognitive and affective), national identification, and collective efficacy predicted social change beliefs, and whether these social change beliefs mediated the effects of other variables on people's intentions to participate in actions against the government's handling of the pandemic.

Almost all hypothesised paths were supported by the model test. Specifically, perceptions that living standards were declining because of the government's handling of the pandemic (cognitive CRD) led to greater perceived discrimination by the government and higher levels of collective anger and frustration (affective CRD). These led, in turn, to greater social change beliefs and greater anti-government action intentions. Collective efficacy also positively contributed to social change beliefs. As expected, *personal* relative deprivation was distinctively related to subjective well-being but not to measures on the collective level. There were moreover crossover effects from collective variables to personal well-being, such that national identification increased, and negative collective emotions decreased, well-being. The overall model explained a substantial part of variance of both collective action intentions and subjective well-being.

### The Role of National Identification

One variable yielded new and intriguing results. Previous tests of the IDEAS model as well as concurrent theoretical models that had focused on minority group activism were the basis of our general hypothesis that stronger identification would be linked to stronger social change beliefs because of a greater perceived unity and alignment of goals within the group. Yet, the effects of national identification were much less straightforward, in line with the greater complexity created by raising objections to one's in-group (see Abrams et al., 2022; Jiménez-Moya et al., 2017; Packer, 2008).

Specifically, we observed significant but countervailing effects of national identification on social change beliefs and collective action intentions. Consistent with predictions, higher national identification predicted greater perceived

9) Direct paths from personal relative deprivation to collective-level variables all proved nonsignificant: with social change beliefs,  $b = -.04$ ,  $SE = .035$ ,  $p = .27$ ; with collective efficacy,  $b = -.04$ ,  $SE = .027$ ,  $p = .15$ ; with negative emotions,  $b = .03$ ,  $SE = .031$ ,  $p = .38$ ; and with perceived discrimination,  $b = -.06$ ,  $SE = .050$ ,  $p = .26$ . Adding these paths did not improve the model fit,  $\chi^2(115) = 627$ ,  $CFI = .958$ ,  $RMSEA = .054$ , 90% CI [.050, .058],  $SRMR = .056$ .

10) We also asked respondents to report how they had voted in the most recent General Election (2019), which allowed us to map party support with self-reported left-right political orientation. Participants who voted for Labour ( $M = 2.55$ ,  $SD = 1.15$ ,  $n = 419$ ) and the Scottish National Party ( $M = 2.90$ ,  $SD = 1.30$ ,  $n = 219$ ) scored as most left-wing. Participants who voted for the Brexit Party ( $M = 4.50$ ,  $SD = 1.10$ ,  $n = 20$ ) or Conservative ( $M = 4.90$ ,  $SD = 1.10$ ,  $n = 351$ ) scored as most right-wing (voters of the Green Party of England and Wales, Plaid Cymru, and Liberal Democrats, fell in-between). However, collective action intentions were not directly related to party vote: Labour and Conservative voters reported similar intentions ( $M = 1.79$ ,  $SD = 1.27$ , and  $M = 1.90$ ,  $SD = 1.54$ , respectively).

discrimination (presumably due to greater concerns for and sensitivity to the group's situation) as well as higher collective efficacy (presumably due to the perception of a more cohesive and therefore more effective group), hence indirectly *increasing* social change beliefs. However, national identification also predicted less negative collective emotions, hence also indirectly *decreasing* social change beliefs. Likewise, its direct effect on social change beliefs was negative whereas its indirect effect on collective action intentions was positive (via political orientation).

As noted earlier, the connection between minority group identification and engaging in pro-minority collective action is conceptually different from that between national identification and engaging in anti-government actions. Specifically, the former involves actions to improve the rights, economic outcomes or recognition of a disadvantaged in-group by challenging the power and authority of a more powerful out-group (or solidarity action by the powerful out-group to support the disadvantaged group, see e.g., Thomas et al., 2012; van Zomeren et al., 2011). In contrast, the latter involves disadvantaged members within the larger societal group challenging the use of power by its own leadership for the sake of the societal group at large (Sweetman et al., 2013), in this case fighting restrictions and measures *enacted by their own elected government*. This poses a strong identity dilemma because those who care most about their national identity will both want to remain strongly loyal and, at the same time, be strongly motivated to express dissent to improve the group's situation (Packer, 2008). This dual motivational pressure may help to explain why, in the present research, national identification had both positive and negative implications for collective action intentions.

As noted previously, the notion that a common national identity is necessary for the development of stable democratic states (whose authorities are trusted) is a consistent theme in the literature (e.g., Easton, 1975; Ferrera, 2005; Lenard & Miller, 2018). For example, national identification (especially under the forms of national attachment and pride) is typically associated with greater trust in the government (Berg & Hjerm, 2010), and this in turn is known to attenuate anti-government protests (Jenkins et al., 2008). This is consistent with our finding that national identification is associated with lower intentions to participate in actions against the lockdowns and other governmental restrictions. Yet, national identification is also likely to increase sensitivity to insults or threats to cherished in-group values (such as freedom or equality, which are strongly upheld in the UK). Therefore, defence of the national identity also implies a motivation to act to protect those values, leading to indirect positive effects on people's willingness to engage in anti-government collective action. In the present research, the measure of national identity focused on national attachment (i.e., "I feel British") but did not differentiate between loyalty to government or commitment to in-group prototypical values. It seems likely that more differentiated measures of national identification, for example distinguishing blind, conventional, and constructive patriotism (see Schatz et al., 1999; Sekerdej & Roccas, 2016), could better determine the unique effects of its different facets.

## Identification, Political Orientation, and the Government in Office

Our study highlights that both identity and ideological concerns are at stake in anti-government collective actions. Therefore, it is important to consider the wider political context because the political affiliation of the government in office and the specificities of the situation against which people are protesting create the frame within which psychological variables operate. In the context of the present study, a newly re-elected Conservative government was in office in the UK, having gained a very substantial majority in the House of Commons. National identification tends to be stronger amongst right-wing individuals (e.g., Verkuyten et al., 2022; which was also the case in the present data), so it is unsurprising that strongly identified, more right-wing individuals were reluctant to act against the government. This dynamic might also help to explain why national identification was associated with lower feelings of anger and frustration in face of the experienced discrimination. These relationships might not have been as strong had a left-wing government been in power.

In addition, individuals' core values tend to vary with their political orientation, such that right-wing individuals are, for example, (comparatively) more attached to values of loyalty and authority while left-wing individuals are more attached to care and fairness (Haidt & Graham, 2007; Kivikangas et al., 2021). As such, and in line with our data and earlier reasoning, it makes sense that anti-lockdown demonstrations protesting infringement of personal and economic freedoms have predominantly been carried out by individuals on the right wing of the political spectrum internationally

(e.g., Jarynowski, 2022; Sanders, 2020; Schradie, 2020). Other issues, however, may be more central amongst left-wing individuals, in which case the effect of national identification might differ or even reverse.

The idea that national identification invoked considerable ambivalence amongst conservatives is also reflected by splits within the parliamentary Conservative party itself at the time. The leadership followed the example of most other countries and imposed various restrictions to tackle the spread of the pandemic, but many Conservative Members of Parliament opposed the restrictions, calling for a faster reopening of economic activities (Savage, 2020). It must also be noted that the UK system is marked by devolution, with separate legislatures and executives in Scotland, Wales and Northern Ireland. During the COVID-19 pandemic the different administrations were in charge of deciding and implementing restrictive measures in each respective nation, and although they mostly tried to keep a homogeneous set of rules, there were also salient differences at times. Despite these differences, in the present data, the subsamples of England, Scotland and Wales produced similar results; most notably, the relationship between national identification and the other variables were identical in each sample. However, consideration of identification not just at the UK level but also at the regional national level could provide further insights on the dynamics of anti-government collective action. Future research is needed to investigate further the complex dynamics of national identification, political orientation, values underpinning the issue at stake, and political affiliation of the government in office—at the national but also the regional level (see Bechhofer & McCrone, 2009; Ditrich et al., 2021).

## Limitations and Future Directions

The present study offers several strengths and new insights. Notably, it relies on a representative sample and data were collected at a unique timepoint during the COVID-19 pandemic, where tensions between citizens and the UK government were particularly salient (Reicher & Stott, 2020). As such, the results may have broader consequences for behaviour during the pandemic in general. As some have noted, protests during the pandemic have rarely been about one topic alone (Gerbaudo, 2020) but conveyed a general dissatisfaction towards masks regulation, lockdowns, vaccination, and so on. Although this might imply that participants in protests may bring an array of different objections (motivated for example by economic concern, a reactionary ideology or even conspiracy beliefs), research shows that these different grievances tend to overlap (Jarynowski, 2022). For example, anti-mask and anti-vaccine attitudes are positively correlated and underpinned by similar concerns (a general “aversion to mandates”, Martin & Vanderslott, 2022). As a result, we would expect that the predictors of collective action highlighted in the IDEAS model might also influence other attitudes (Breakwell et al., 2022) and behaviours, including the adoption of health-protection behaviour, respect for social distancing measures, and vaccine hesitancy. Future research should test further how collective action and personal behaviour are intertwined, and what role psychological variables, most notably grievances and perceived deprivation, play for both.

While the particular time frame and point in history of the present research may limit its application to different contexts, times, or types of tensions, the emerging array of global challenges (such as climate change, supply chain or energy crises) might mean that citizens’ objections to their own governments will become more rather than less prevalent. This would make the identity dynamics considered here increasingly pertinent. Future studies will need to pursue the investigation further, considering different contentious issues in different national contexts.

Given the unpredictability of the timing of particular government actions it was only feasible to conduct a cross-sectional study and we therefore relied on preregistration and a strong theoretical model to test the plausibility (but not necessarily existence) of the causal relationships specified in that model. No model is likely to be exhaustive or completely parsimonious but the IDEAS model provides a good fit to the data. Moreover, the present data also provides new evidence for the generality of the model by testing it in a different time and context from that of prior research. Future research relying on longitudinal designs, as well as qualitative and experimental investigations, will enable tests of the generality of particular causal paths (see e.g., Zubielevitch et al., 2020).

A particular insight from the present research, worthy of deeper investigation, is that the effects of group identification are by no means univalent or even unidirectional, nor do they reside only at the collective level. These aspects also raise questions for other spheres of political and non-political activity, such as how people respond to their own group’s political misdeeds (Abrams et al., 2021) or to conflicts that pit their personal well-being against collective goods (e.g.,

through taxation systems). Further interesting avenues for future research include the potential moderating contextual factors such as whether the government in power is liberal or conservative; and whether the protest issue is primarily framed by liberal or conservative concerns within the same national context. As mentioned above, it could also be informative to examine the role of different forms of identification (e.g., politicised) as well as other levels of it, notably at the regional or even more local level—especially in contexts with a strong local government or a local government that is not aligned with the national government (see e.g., Huici et al., 1997).

## Conclusion

This is the first study to test the IDEAS model of collective action in the arena of citizen-focused anti-government actions. Results largely supported the theoretical model, highlighting the central role of collective (but not personal) relative deprivation as well as collective efficacy in predicting social change beliefs, which were in turn strongly related to collective action intentions (and mediated the effect of all other variables). Subjective well-being was distinctively related to personal relative deprivation but was also affected both positively by social identity and negatively by collective deprivation. Finally, results pointed to the complex role of national identification, which was both positively and negatively related to social change beliefs through increased perceived discrimination and collective efficacy but decreased negative emotions. The literature suggests meaningfully nuanced relationships between national identification, political orientation, and political trust (in any government). Accordingly, we suggest that, unlike collective action to improve in-group minority rights the effects of national identification are more nuanced in their links to broader anti-government protests. This is particularly, but not only, because of the tension between in-group loyalty and reinforcing in-group values. Thus, the role of in-group identification might also depend on other contextual factors, including respondents' political orientation, the party affiliation of the government in office, and the specific issue at stake (van Zomeren et al., 2018). These caveats aside, the present results demonstrate the potential of the IDEAS model to understand anti-government forms of collective action, suggesting this will be a fruitful avenue for future research.

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**Data Availability:** For this article, a data set is freely available (Lalot, Marinthe, Kasper, & Abrams, 2023b).

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## Supplementary Materials

The Supplementary Materials contain the following items (for access see [Index of Supplementary Materials](#) below):

- the pre-registration protocol for the study
- all research data, code, and materials for the analyses

### Index of Supplementary Materials

Lalot, F., Marinthe, G., Kasper, A., & Abrams, D. (2023a). *Mobilising IDEAS in the COVID-19 pandemic* (AsPredicted-ID: #49122) [Pre-registration protocol]. AsPredicted. <https://aspredicted.org/ts9qf.pdf>

Lalot, F., Marinthe, G., Kasper, A., & Abrams, D. (2023b). *Supplementary materials to "Mobilising ideas in the COVID-19 pandemic: Anti-lockdown actions and the Identity-Deprivation-Efficacy-Action-Subjective well-being model"* [Research data, code, and materials]. OSF. <https://osf.io/gwz8u/>

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