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Understanding protest:
A multi-lens examination of collective action predictors

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Acknowledgements

The last four years, during which I produced the research described in the following pages, were at various times incredibly - and seemingly increasingly - difficult, for me, for my communities, and for the planet. From the tiny perspective of my own life, they were set in little nook in Germany, where the language felt too difficult, the weather too gloomy, and the sea too far away. They also witnessed what we believed was the long-awaited revolution in my home country, followed by an indescribable economic and social collapse, which seemed to unravel too quickly for any processing, and too slowly for any optimism. And they ended with a global pandemic, one which confined me and the rest of the world to our houses, left to survive in each other's physical absence. To think that these four years also involved me writing this dissertation is barely believable, and I would like to use these acknowledgements to explain this bizarreness. My account is the following - this monograph is the product of group-work, carried on day in and day out by a number of people, whom I would simply like to share the credit with.

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General introduction

In the last four years alone, during which the research leading up to this dissertation was being undertaken, political protest spanned five continents and dozens of countries, including the three where I lived within this period of time (i.e., Lebanon, Germany, and the U.S.). Social scientists have indeed described protest as an increasingly ubiquitous aspect of contemporary political life (Norris, 2002). In a particularly tumultuous period around the winter of 2019, for instance, journalists reported that protests had been roiling simultaneously in – at least, Algeria, Bolivia, Chile, Colombia, Ecuador, Egypt, France, Germany, Guinea, Haiti, Honduras, Hong Kong, India, Indonesia, Iran, Iraq, Lebanon, the Netherlands, Spain, Sudan, the UK, and Zimbabwe (Ehrenreich, 2019). While these sites are so immensely geographically disparate and culturally heterogeneous, they all witnessed spectacles of individuals or groups engaging in nonconventional political actions to voice dissatisfaction with some social or political state of affairs. This monograph coalesces around such actions, referred to within its pages variously as collective action or (political) protest. It will report a string of empirical, quantitative studies that unanimously center protest as their outcome variable, or the phenomenon they aim to explain. And while they diverge vastly in their conceptual frameworks, methodological approaches, and contributions to the literature(s), they are bound by a deep commitment to acknowledge and delve into the complexity of protest, in multiple regards.

Researchers from across the social sciences have been pondering the question of protest for over a century (Van Zomeren et al., 2008). The result is a vast and multi-disciplinary universe of findings, multifariously providing insights on when, why, how, and which individuals participate in political protest, among other questions. An exhaustive review of this universe is beyond the scope of the current text, but I hope to provide with this introduction something of a roadmap for what will follow. Indeed, while there is no shortage of ways to categorize the research on protest along one or the other dimension, I will focus on

three specific aspects that can help situate the current dissertation and its contributions. First, I will discuss the importance of the positionality of the protestors, by reviewing the literatures on protest by disadvantaged versus advantaged groups, and introducing Chapter 1 as one that addresses the perspective of the advantaged. Second, I will highlight the usefulness of considering both macro and micro-levels of analysis in the study of protest, introducing Chapter 2 as one that seeks to implement that. And third, I will deliberate on the role of repression as an example of macro-level factors, both experienced structurally and individually, setting the stage for Chapter 2 and Chapter 3. I will then close this introduction with a brief overview of each chapter's objectives.

Defining the central terms: Collective action and protest

This dissertation will utilize the terms "collective action," usually employed by social psychologists, and "protest," more often used by political scientists and sociologists, to refer to the same set of phenomena. I draw on social psychological definitions of collective action, which broadly conceptualize it as actions that individuals engage in on behalf of a group, to improve the group's conditions (Thomas et al., 2020). This can include situations when a state of affairs is perceived as being unjust to one's own group (i.e., disadvantaged collective action, see Van Zomeren et al., 2008), or to a group over which one's group is perceived to have accrued unjust benefits (i.e., advantaged collective action, see Leach et al., 2002). Indeed, while in Chapter 1 I will zoom in on *advantaged group members' collective action in support of the disadvantaged* (here, White Americans in support of Black Americans), and in Chapter 3 I will center on *disadvantaged group members' collective action* (here, Chileans against their government), in Chapter 2, I will broadly investigate collective action without distinguishing between positionalities.

Protest, moreover, generally refers to a variety of methods employed by individuals and groups within a political system, to voice their dissatisfaction related to some social or political state of affairs (Chong, 2001). It is located in contrast to conventional political

participation, such as belonging to a political party or voting (Quaranta, 2017). The repertory of protest can include petitions, demonstrations, boycotts, and sit-ins for example (see Klandermans, 1997). In the following studies, collective action or protest will span signing petitions (Chapters 1 and 2), attending demonstrations (Chapters 1, 2, and 3), or being politically active on social media (Chapter 3), among other methods.

The binding element, across these different streams of research, is therefore an interest in collective action or protest as the engagement in nonconventional political action against some perceived social or political state of affairs.

On the importance of considering protestor positionality

The disadvantaged perspective

Early theories focused on material conditions as the all-encompassing driver of protest, inspiring a long tradition of work on structural dispossession or deprivation (e.g. Hovland & Sears, 1940), and subsequently generating a considerable corpus of research on what motivates disadvantaged group members to protest (Van Zomeren et al., 2008). A plethora of historical analyses cumulatively demonstrated, however, that the relationship between objective material conditions and protest is less robust than this intuition suggests (e.g., Green et al., 1998). The literature on protest consequently shifted its focus to subjective individual perceptions of group disadvantage (see Van Zomeren et al., 2008). Still centering (subjectively) disadvantaged group members, researchers compiled a multitude of predictors of protest that fall under the umbrella of a *grievance path* to protest, including (political) dissatisfaction (e.g., Dalton et al., 2009), injustice perceptions (e.g. Smith and Ortiz, 2002), and anger or outrage at disadvantage (e.g., Mummendey et al., 1999).

Soon enough, researchers introduced a second and complementary central path to protest by the disadvantaged, one rooted in instrumental consideration (Klandermans, 1984). This brought about a long tradition of research centering the structural availability of resources as an additionally important predictor (Van Zomeren et al., 2008). This literature

demonstrated the mobilizing role of social or organizational embeddedness, for instance, by capturing the collective networks that individuals belong to, and showing that these increase protest by providing the resources necessary for mobilization (e.g., Klandermans et al., 2008). In a similar progression to research on grievances, however, work on instrumental precursors to protest moved from objective socio-cultural resources to subjective or individual assessments thereof, captured by the construct of perceived efficacy (Van Zomeren et al., 2008). Research subsequently catalogued the roles of multiple types of efficacy in spurring protest. This included studies showing that disadvantaged group members are more prone to protest when they feel individually (e.g., Klandermans et al., 2008) or collectively (e.g. Mummendey et al., 1999) efficacious, and when they feel like their own participation is important for the success of the relevant political action (i.e., participative efficacy, e.g., Zomeren et al., 2013).

  With the advent of Social Identity Theory (Tajfel & Turner, 1979), a third cornerstone of the literature has put forth an identity-based path to protest. Social Identity Theory posits that an individual's self extends beyond their personal self to a social self. Consequently, individuals seek and benefit from positive social identities that are derived from their group memberships. When these group memberships are disadvantageous, individuals have multiple mechanisms to resort to, one of which is collective action or protest (Tajfel & Turner, 1979). Social identity theorists therefore advanced the idea that the more disadvantaged group members identify with their groups, the more they are likely to engage in protest (Van Zomeren et al., 2008). This has been shown to occur across a wide-ranging set of collectives, including, for instance, those that are gender or sexuality-based (Kelly & Breinlinger, 1995; Simon et al., 1998), age-based (Simon et al., 1998; Klandermans, 2002), nationality-based (Fischer, et al., 2008; Klandermans, 2002), and class-based (Klandermans, 2002; Veenstra, & Haslam, 2000). It has also been shown that the more individuals identify with social

movements themselves; a construct termed politicized identification, the more they are likely to participate in protest (e.g., Simon et al., 1998).

Although I will further complicate this picture in the subsequent section with structural influences on protest, these three subjective paths; i.e., the grievance-path, instrumental path, and identity-based path, have taken up much of the research on why disadvantaged group members engage in protest. And as I will return to later, my second and third chapters indeed fall back on (some combinations of) these three pathways.

The advantaged perspective

That said, individuals have been known to join protest on behalf of the disadvantaged from different positionalities, besides disadvantage. Black Lives Matter marches more often than not include White individuals, women's demonstrations for gender equality are repeatedly joined by men, and LGBTQ+ protests consistently involve the presence of heterosexual allies (see Kutlaca et al., 2020). The literature on what motivates the advantaged to protest in support of the disadvantaged is a relatively nascent and small one. Early research in this direction was primarily qualitative, and mostly concerned itself with mapping the experiences of those acting in solidarity and pinpointing potential developmental predictors of such acts (for a review, see Louis et al., 2019). Later, quantitative investigations largely took on the task of extending the findings from the work on disadvantaged protest, to the advantaged. The resulting literature therefore mirrored that on disadvantaged groups' protest to a large extent, showing that mechanisms like injustice perceptions, assessments of efficacy, and identification with the disadvantaged, were all relevant predictors for advantaged protest too (e.g., Van Zomeren et al., 2011). While these findings are undeniably important, to limit our analysis of precursors to advantaged protest to the same set of predictors of the disadvantaged, seemed to me early on in my research, to be potentially reductionist. One way in which the current dissertation manifests its commitment to the complexity of protest, I

believe, is its provision in Chapter 1, of an investigation of advantaged group members'

protest in its own right, by exploring predictors that are particular to it.

Specifically, I found the relational aspect of advantaged protest to be both fascinating,

and simultaneously under-acknowledged in the literature. To put it plainly, when an

advantaged group member is deciding whether or not to engage in an act of solidarity, they by

the very definition of this act, do so *with the disadvantaged in mind*. That our accounts of

solidarity lacked an appreciation of this particularity of advantaged protest, inspired Chapter 1

of this dissertation. More concretely, my realization that work around solidarity

overwhelmingly centered the perceptions, attitudes, and beliefs of the advantaged, was

coupled with my delving into the literature on intergroup meta-beliefs, defined as the beliefs

that group members hold about how other groups perceive them (for a review, see Frey &

Tropp, 2006). It quickly seemed like a possibly cardinal missing piece of the solidarity puzzle

– potentially absent because of the heavy reliance on disadvantaged protest as the starting

point for research on advantaged protest, was precisely this meta-level. Would our

understanding of solidarity benefit from an examination of how the advantaged believe they

are perceived by the disadvantaged? This was the broad starting point of my first chapter.

Studies on intergroup meta-beliefs have demonstrated that people are heavily

influenced by their beliefs regarding how others perceive them, and have highlighted these

meta-beliefs as crucial in shaping intergroup relations (e.g., Livingstone et al., 2019). Some

work has even proposed that meta-beliefs contribute more substantially to intergroup

interactions than beliefs about outgroups (e.g., Vorauer & Kumhyr, 2001). It is therefore

unsurprising that, two decades ago already, some researchers were positioning meta-beliefs as

a necessary ingredient for a "truly social, social psychology" (Otten, 2002). It seemed

reasonable to posit that this is particularly the case for advantaged protest, which inherently

involves thinking about and oftentimes working with, the disadvantaged. Of particular

interest, were advantaged group members' meta-beliefs regarding how the disadvantaged

view *their role in perpetuating and redressing intergroup inequality*, which I expected should play a primordial role in (de-)motivating solidarity.

To put this idea to the test, I conducted two studies in the context of racial inequality in the U.S. Recall that during the time of my PhD research alone, over 500 Black individuals were killed by the police across America (Statista Research Department, 2021); including Stephon Clark, Breonna Tylor, and George Floyd (Young Storytellers, n.d.). These murders sparked multiple waves of protests under the umbrella of Black Lives Matter; arguably the largest social movement in U.S. history which were routinely joined by White Americans (Buchanan et al., 2020).

Against this backdrop, I sought to explore the potential roles of three specific meta-beliefs that White Americans could hold about Black Americans; the meta-beliefs that Black Americans believe White Americans (1) are allies in the fight against racial inequality (ally meta-belief), (2) are passive in that fight (inactive meta-belief), and (3) are responsible for the Black community's ongoing struggles (responsible meta-belief). The ally meta-belief captured a positive meta-belief, while inactive and responsible both captured negative meta-beliefs. And while I expected that the (positive) ally meta-belief would be positively associated with collective action tendencies among White Americans, I expected the negative meta-beliefs to have systematically different associations with their protest intentions, depending on their levels of White identification.

Specifically, a large literature on social identification has demonstrated that individuals are motivated to defend their groups to the extent that they identify with them (e.g., Branscombe et al., 1999). Since high identifiers are motivated to uphold a positive ingroup image (Doosje & Branscombe, 2003), they may justify or deny the wrongfulness of their groups' actions to protect their identity (e.g., Bilali et al., 2012). Low identifiers, however, have been shown to be more ingroup critical, and to experience more group-based

guilt. They are therefore more likely to react in a compensatory way in response to negative portrayals of their ingroup (e.g., Doosje et al., 2006).

I therefore hypothesized that among low identifiers, endorsing inactive and responsible meta-beliefs would be linked to higher collective action tendencies, explained by perceived collective guilt and obligation to act against racial inequality. Among high White identifiers, conversely, endorsing inactive and responsible meta-beliefs would be linked to protest tendencies, explained by perceived unfairness.

In sum, the first chapter sought to contribute to the literature on protest, by zooming in on the perspective of the advantaged and studying it in its own right. While previous accounts of advantaged protest had largely relied on the preceding research centering disadvantaged group members, I aimed to bring forth the meta-perspective as an indispensable level of analysis for advantaged protest in solidarity with the disadvantaged. And as I will return to in the general discussion of this dissertation, these two positionalities; i.e., disadvantaged and advantaged, are far from presenting an exhaustive list of the perspectives individuals could hold vis-à-vis protest. Other positionalities may include those of bystander group members or dual perspectives (e.g., multiracial individuals) for instance, and I believe that the meta-level may also be relevant to understanding protest from such positionalities.

On the importance of integrating macro and micro-levels of analysis

As I already hinted to in the previous section, different traditions to the study of protest have historically diverged into foci on – at least – two different levels of analysis. Specifically, various approaches to protest can be described as having adopted either a macro or a micro perspective. The macro perspective has most commonly been investigated by political scientists and sociologists, and has generally examined characteristics of the social or political contexts that may (de-)mobilize protest (see Dalton et al., 2010), be it at the national, regional, or international levels for example. This literature has investigated such factors as culture or educational institutions (e.g., Donni et al., 2021), national economies and the

magnitude of objective inequality (see Gurr, 1968), and the openness (or lack thereof) of political opportunity structures (e.g., Corcoran et al., 2011). By contrast, the micro perspective has most commonly been researched by social psychologists, and has generally centered on individual-level factors that influence protest engagement (see Van Zomeren et al., 2008). This literature, as previously summarized, has put forth at least three core individual-level pathways to protest, including the grievance-based, instrumental, and identity-based paths.

Importantly, neither of these two broad corpora of research denies the relevance of the other. Quite the opposite, it has been argued that both macro-level work and micro-level work on protest hold assumptions about macro-micro links, but they generally refrain from expounding on those (see Corcoran et al., 2011). This has created a plethora of theoretical propositions and empirical findings awaiting integration, and has increasingly generated calls for combinatory approaches, or for adopting a macro-micro perspective (e.g., Opp, 2010). Van Zomeren (2020), for instance, summarized the significance of such a macro-micro perspective by proposing that "whereas sociologists [and political scientists] should perhaps appreciate more the multitude of motivations for political action that individuals may have, psychologists should perhaps appreciate more that their studies are embedded in a social structure that mostly remains invisible and unidentified, yet is powerful" (p. 11). As a social psychologist examining protest myself, I set out to answer this call in my own research, bringing about the inspiration for Chapter 2 of this dissertation.

Specifically, I aimed to explore the role of repression; a macro-level factor, in influencing not only protest (which would have amounted to adopting a macro perspective), but also the micro-level pathways to protest. As I will return to, repression can broadly be defined as a multifaceted phenomenon that seeks to stifle political protest and social change (see Earl, 2011). At the macro-level, repression can be conceptualized as a tightening of political opportunity structures, whereby opportunities for political participation are thought

to facilitate protest (Kitshelt, 1996; McAdam, 1982). One way to capture macro-level

repression is to zoom in on countries, thereby focusing on "state-centered opportunity

structures" (Tarrow, 1996). This approach involves operationalizing macro-level repression as

the extent to which the state is repressive, or the extent to which it closes political

opportunities; which is a stable feature of countries (Gamson & Meyer, 1996). This can

involve such national characteristic as the extent of the government's effort to censor political

content, the extent to which it establishes barriers to the emergence of novel political parties,

or the extent to which it institutionally sanctions certain freedoms of expression (Michael et

al., 2019).

Importantly, while most of the micro-level literature on protest that I had been familiar

with and drawn on in my own previous research (e.g., Adra et al., 2020a), was undertaken in

liberal Western democracies (Ayanyan & Tausch, 2015), the vast majority of the world

population lives in countries that are more repressive in comparison (Alizada et al., 2021).

Indeed, liberal democracies include less than 15% of the world population today (Alizada et

al., 2021) and these countries' structural characteristics inherently facilitate protest (Van

Zomeren, 2020). I therefore reasoned that there exists a gap in our understanding of whether

and how micro-level motivators may operate systematically differently in more repressive

contexts; which constitute the majority of the globe.

To fill this gap, in Chapter 2, I analyzed data from the seventh wave of the World

Value Survey (Haerpfer, 2020), and operationalized political repression as a country-level

characteristic, using the political liberties scale from the Varieties of Democracies (V-Dem,

Michael et al., 2019) project. This index is based on indicators that reflect state repression,

including, for instance, government censorship effort, freedom of discussion, academic, and

cultural expression, and bans and barriers to the formation of new political parties. I therefore

captured repression as a (macro) long-standing characteristic of the social context; here, the

country, that structurally inhibits freedom of mobilization. I subsequently zoomed in on its

influence on (micro) grievance-based and instrumental paths to protest, which I

operationalized as political dissatisfaction on one hand, and as efficacy, organizational

embeddedness, and informational embeddedness on the other. And while I will return to a

discussion of repression itself in the following section, I would like to briefly mention the two

approaches to linking the macro (i.e., country-level repression) and micro (i.e., individual-

level predictors) levels in the study of protest that I adopted in Chapter 2.

To start, I drew on Opp's (2010) Structural Cognitive Model, which aims to

deconstruct the "black box" (Corcoran et al., 2011, p. 577) that usually masks the macro-micro

links in both our macro and micro-level work on protest. Opp (2010) argues contextual

characteristics at the macro-level, such as country-level repression, have the power to

systematically influence specific individual processes at the micro-level, that are involved in

(de-)motivating protest. My resulting approach amounted to exploring how macro-level

characteristics of the context (here, country-level repression), *predicted* micro-level processes

(here, individual predictors of protest). For example, this translated into my investigation of

whether country-level repression predicted overall levels of political dissatisfaction, and in

this case, I had competing hypotheses. On the one hand, political science research has

demonstrated a positive relationship between actual levels of governments repression and

individuals' evaluations of repressive conditions in their country (e.g., Anderson et al., 2002),

which suggests that higher levels of repression could predict higher levels of dissatisfaction.

On the other hand, social psychological research has shown that people are more motivated to

justify the systems they live under, when they feel more controlled by the authorities that

govern over them (see System Justification Theory; Jost et al., 2015). This suggests that

individuals in countries with higher repression could actually report less dissatisfaction.

Beyond examining how country-level repression may shape individual-level

predictors of protest, I also built on interactionist models of behavior (e.g., Marshall &

Brown, 2006; Schmitt et al., 2013), and argued that contextual characteristics at the macro-

level, such as country-level repression, may modify the functions of individual processes at the micro-level, and their influence on protest. The broad logic here is that the same micro-level factors may play a larger or a smaller role in shaping protest, depending on particular contextual presses and obstacles to protest that make them more or less relevant under repressive regimes. My resulting approach amounted to exploring how macro-level characteristics of the context (here, country-level repression), *moderated* the links between micro-level processes (here, individual predictors of protest) and protest. For instance, this translated into my investigation of whether country-level repression would moderate the link between political dissatisfaction and protest. Drawing on previous research which has shown that perceptions of structural disadvantage may have less influence on protest when the latter is associated with high costs (e.g., under more repressive conditions), I predicted that political dissatisfaction would play a smaller role in more repressive countries (Corcoran et al., 2015).

I set out to explore these two types of propositions (i.e., country-level repression predicting individual-level processes, and moderating their links with protest) jointly, in Chapter 2, with the conviction that such a combined macro-micro approach has the ability to advance the complexity of our accounts of how protest unfolds in different parts of the globe.

On the importance of adopting a multifaceted understanding of repression

The particular macro influence on protest that I sought to investigate in Chapter 2 was country-level repression. I therefore delved into the literature on the effects of repression on protest, which is substantial, multi-disciplinary, and far from conclusive. The very definition of repression itself proved to be contentious, as a result of years of contributions from across the social sciences, including those of sociologists, political scientists, historians, and psychologists (see Earl, 2011). While political scientists have explored repression as a structural or institutional closing of political opportunities (e.g., Kitshelt, 1996), sociologists have tended to study repression as "repressive actions directed at individuals and groups" (p. 261, Earl, 2011) by the state and its affiliates (e.g., the police) in the context of specific social

movements, and social psychologists have centered individual perceptions of such repressive

actions (e.g., Ayanian & Tausch, 2015).

Interestingly, previous research on the influence of repression on protest does not

unanimously support the arguably intuitive assumption that repression does have a

demobilizing effect. Indeed, from the literature on repression and protest emerges a seemingly

fundamental contradiction, sometimes referred to as the *repression paradox* (see Kurtz &

Smithey, 2018). That is, repression "smothers popular mobilization under some

circumstances, but at other times […] will provoke mass collective action rather than pacify

the target population" (Brokket, 1993). In other words, while some investigations demonstrate

that repression successfully quells protest, other examinations show that it increases it (Earl,

2003, 2011). I set out, in chapters 2 and 3, to explore the idea that these contradictory

downstream influences of repression on protest may arise from its impacting of multiple paths

to protest, some of which account for its deterring, and others for its potentially mobilizing

effects.

To do so, I also sought to zoom in on different aspects of repression. Specifically,

recall that in Chapter 2 – in line with political science traditions – I centred repression as a

macro, country-level characteristic. In Chapter 3, however, I zoomed in on a specific social

movement witnessing heavy state repression, and I captured repression – in line with social

psychological approaches – as subjective experiences of individuals with negative state

sanctions. I consequently operationalized individual experiences with repression as exposure

to police violence during participation in the movement. And while in Chapter 2, I explored

the influence of macro repression on grievance-based and instrumental paths to protest, in

Chapter 3, I investigated the influence of individual-level experiences with repression on the

grievance-based path, instrumental path, and additionally, an identity-based path to protest. I

operationalized these paths by measuring anger (grievance-based path), movement efficacy

and embeddedness in the movement (instrumental path), and identification with the

movement and perceptions of solidarity with its members (identity-based path). I also

explored the role that feelings of fear may play in further explaining the relationship between

individual-level experiences with repression and protest. Building on and extending Chapter

2, in Chapter 3, I investigated whether exposure to police violence influenced protest *via* these

three paths and fear, and whether it moderated the links between them and protest.

I did so among a sample of participants in the "Chilean Spring" of 2019, a large-scale

movement for social and economic reform that was heavily repressed by the authorities,

which utilized various and severe forms of police violence, including shooting with pellets,

using teargas, and organizing raids (Somma et al., 2020). I believe that the complementary

approaches of Chapter 2, i.e., exploring country-level repression, and Chapter 3, i.e.,

exploring individual-level experiences with repression, have the potential to offer illuminating

insights on the urgent question of how the pervasive existence of repression may influence

protest.

Overview of chapters

Chapter 1 will present the results of two online survey studies centering advantaged

protest, conducted in the context of racial inequality in the U.S, and on samples of

White Americans. It will examine the roles of three intergroup meta-beliefs that White

Americans could hold: responsibility, inactivity, and allyship, in shaping their protest

intentions in support of Black Americans. It will specifically ask three research

questions. First, do these three meta-beliefs influence White Americans' protest

intentions in support of Black Americans? Second, are the links between the inactive

and responsible (i.e., negative) meta-beliefs moderated by White identification? And

third, what are the processes underlying these links?

These two studies (Study 2, preregistered on the Open Science Framework; OSF),

were published (Adra, et al., 2020b) in a special issue of the European Journal of

Social Psychology, entitled "Solidarity in the Spotlight: Understanding Allies'

Participation in Social Change."

Chapter 2 will present the results of a large, cross-cultural study of multilevel protest

predictors using data from the seventh wave of the World Value Survey and the

Political Liberties scale from the Varieties of Democracies project, to operationalize

country-level repression. It will specifically ask three research questions. First, what is

the direct relationship between country-level repression and protest? Second, does

country-level repression shape micro-level grievance-based and instrumental

predictors of protest? And third, does country-level repression moderate the

relationships between protest on one hand and its micro-level grievance-based and

instrumental predictors on the other?

This study has been preregistered on OSF, and I am currently preparing it as a

manuscript for submission to publication.

Chapter 3 presents the results of an online survey study centering protest within the

context of the "Chilean Spring" of 2019. It will explore the role of individual

experiences with repression, operationalized as exposure to police violence, in shaping

protest. It will specifically ask three research questions. First, what is the direct

relationship between exposure to police violence and protest? Second, does exposure

to police violence predict protest *via* grievance-based, instrumental, and identity-based

paths, and feelings of fear? And third, does exposure to police violence moderate the

relationships between grievance-based, instrumental, and identity-based predictors,

and feelings of fear on one hand, and protest on the other?

This research was part of a larger project, which has resulted in a manuscript currently

under review (Li et al., under review). That paper, in contrast to Chapter 3, focused on

radical resistance and its antecedents. A full list of materials can be accessed via OSF.

Chapter 1

What they think of us:

Meta-beliefs and solidarity-based collective action among the advantaged

Historically, the collective action literature has been centered on disadvantaged group members' willingness to take actions to better their conditions (see Becker & Tausch, 2015, for a review). That said, disadvantaged groups often garner support and protest participation from advantaged group members. Accordingly, social psychologists have started investigating advantaged group members' collective action on behalf of or in support of the disadvantaged (henceforth referred to as solidarity-based collective action; e.g., Iyer et al., 2003; Shepherd et al., 2013). So far, this work has largely focused on extending the findings of collective action studies among the disadvantaged, by showing that the central variables that have been shown to predict collective action in that context (e.g., identification with the disadvantaged group, efficacy, injustice perceptions) are also useful in predicting solidarity-based collective action (e.g., Van Zomeren et al., 2011). In this existing literature, the focus has been on the role of perceptions, attitudes, and beliefs about the outgroup in shaping solidarity-based collective action.

In the current research, we extend the existing account of solidarity-based collective action by exploring the role of advantaged group members' beliefs about how the disadvantaged group think of them (i.e., intergroup meta-beliefs), specifically in relation to injustice and inequality. Given that solidarity-based collective action inherently involves working together with the disadvantaged, we argue that this meta-perspective is highly relevant for understanding advantaged group members' engagement in collective action. In the context of racial inequality in the United States, we focused on three meta-beliefs that members of the advantaged group, White Americans, likely hold about their role in perpetuating and redressing inequality: allyship, inactivity, and responsibility. In two studies, we sought to investigate the respective relationships between these meta-beliefs and solidarity-based collective action tendencies, the moderating role of ingroup identification, and the psychological mechanisms underlying some of these relationships.

Meta-beliefs in Intergroup Contexts

While social psychologists have predominantly investigated the role of the beliefs and attitudes that people hold towards outgroups in shaping intergroup relations, recent research has shifted the focus to intergroup meta-beliefs (see Frey & Tropp, 2006, for a review). Some researchers have investigated meta-beliefs along the dimensions of the Stereotype Content Model (Fiske, 1998), by examining meta-warmth and meta-competence in different intergroup contexts (e.g., Figueiredo et al., 2010; Wout et al., 2010). Researchers have also examined meta-beliefs along a positive-negative continuum (e.g., Finchilescu, 2010), meta-beliefs derived from International Image Theory (Obrien et al., 2017), and meta-beliefs derived from acculturation models (Antonio & Monteiro, 2015). These different streams of research have collectively highlighted the fact that individuals are influenced by their perception of others' beliefs about them, and that these perceptions contribute substantially to intergroup relations (Livingstone et al., 2018). Indeed, some studies have even suggested that meta-beliefs play a more central role in shaping intergroup interactions than do beliefs about the outgroup (e.g., Vorauer & Kumhyr, 2001). Such findings have prompted researchers to claim that a truly social psychological approach to any number of intergroup phenomena must include an examination of the meta-level (e.g., Otten, 2002).

Positive Intergroup Meta-beliefs

Research has shown that positive meta-beliefs generally improve intergroup relations (e.g., Vezzali, 2017). Indeed, the expectation of inclusion by outgroup members, which can be understood as a positive meta-belief, was shown to predict more positive attitudes towards the outgroup (Tropp & Bianchi, 2006). Directly relevant to our focus on advantaged group members, Vezzali (2017) demonstrated that the activation of positive meta-stereotypes among members of the dominant group (Italian high school students), led to the anticipation of greater enjoyment of an upcoming interaction with a member of the disadvantaged group (African immigrants). This effect was explained by an increase in positive feelings about

contact and a decrease in concerns about being accepted (Vezzali, 2017). These findings fit nicely within a large body of work indicating that individuals tend to reciprocate evaluations by others, whether positive or negative (Doosje & Haslam, 2005). This claim, however, is further complicated when considering negative intergroup meta-beliefs.

Negative Intergroup Meta-beliefs

In general, negative meta-beliefs have been shown to predict negative outgroup attitudes (Putra & Wagner, 2017) and intergroup hostility (Issmer et al., 2013). The expectation of rejection by outgroup members, for example, was found to predict negative outgroup attitudes (Barlow et al., 2009). These relationships have been replicated in the contexts of fictitious and real outgroups, and can even translate into support for aggression (OBrien et al., 2017). While a plethora of such research has documented that when individuals feel their group is evaluated negatively, they oftentimes reciprocate the negativity (Kteily & Bruneau, 2015), this picture is likely more complex.

When members of the advantaged group believe that the disadvantaged view them in a negative light, they can act defensively (Kteily & Bruneau, 2015; Vorauer, 2003), particularly if the meta-beliefs are seen as inaccurate or offensive. However, they can act in a compensatory manner. For example, in a study of Norwegian majority members, Phelps (2013) found that the more majority members thought immigrants believed they (the majority) were cold, the more they showed willingness to accommodate immigrants. The author speculated that the underlying process involved collective guilt about the majority's moral shortcomings (Phelps, 2013). Lending support to this speculation, in the context of a past colonial conflict, Figueiredo and colleagues (2010) showed that Dutch participants who thought Indonesians held a negative belief towards them reported higher group-based guilt and compensatory behavioral intentions. These findings together demonstrate that negative meta-beliefs can have either negative or positive consequences for intergroup relations, depending on how advantaged group members perceive them. We will return to these

diverging consequences when discussing negative meta-beliefs in the context of solidarity-based collective action

Meta-beliefs and Solidarity-based Collective Action

Based on the research reviewed above, and the consistent finding that advantaged group members readily think at the meta-level (e.g., Vorauer et al., 2000; Vorauer & Kumhyr, 2001), we argue that meta-beliefs are crucial for understanding solidarity-based collective action. Specifically, advantaged group members' meta-beliefs regarding how the disadvantaged view *their role in perpetuating and redressing intergroup inequality,* should predict their tendencies to engage in collective action on behalf of the disadvantaged.

In the context of racial inequality in the U.S., we focused on three meta-beliefs that White Americans may hold, and that should be particularly relevant to solidarity-based collective action. An *ally* meta-belief captures White Americans' belief that Black Americans think of them as allies in the fight against racial inequality. An *inactive* meta-belief captures White Americans' belief that Black Americans think of them as passive in that fight. A *responsible* meta-belief captures White Americans' belief that Black Americans think of them as responsible for the Black community's ongoing struggles.

Drawing on both real life examples and the literature on intergroup inequality, we reasoned that these three meta-beliefs should be highly relevant to solidarity-based collective action. Concepts of allyship, inactivity, and responsibility are pervasive in narratives attempting to position White people in the fight against racial inequality, both among White and Black Americans. For instance, White Americans have addressed their fellows to argue that "[White Americans] need to become trustworthy *allies*" (Morrison, 2013; emphasis added). Others have stressed that "[White Americans] cannot stay *silent*, because silence is acceptance" (Davidson, 2017; emphasis added). Still others have asserted that "[racism] was constructed and created by white people, and the ultimate *responsibility* lies with white

people" (DiAngelo, in Iqbal, 2019; emphasis added). Such statements mirror those made by Black Americans in their positioning of White people in the fight against racial inequality.

The concepts of allyship, inactivity, and responsibility also largely map onto concepts that social psychologists have investigated in contexts of intergroup inequality and challenges to it. For instance, in a growing body of literature, researchers have investigated the ways in which the advantaged can act as allies (Louis et al., 2019, for a review), and be perceived as such (e.g., Kutlaca et al., 2019). In parallel, research on the advantaged has highlighted that oftentimes, "[they] have little reason to respond to others' claims of relative deprivation," (p. 139; Leach et al., 2002) echoing the concept of inactivity. Finally, much of the literature on the role of group-based guilt in shaping attitudes towards racial compensation explores the focus of the advantaged on their groups' responsibility for wrongdoing (Iyer et al., 2003). Allyship, inactivity, and responsibility also emerge, at least in part, in theories of intergroup relations (e.g., International Image Theory; Alexander et al., 1999), work on the phenomenology of advantage (e.g., Leach et al., 2002), and models conceptualizing solidarity by majority group members (e.g., Subašić et al., 2008). The ubiquity of these concepts in real life and social psychological literatures therefore informed our decision to zoom in on them at the meta-level – that is, the extent to which the advantaged group believe that the disadvantaged view them as allies, inactive, or responsible in the context of intergroup inequality. While these three meta-beliefs might be far from exhaustive, we argue that they are highly relevant for our understanding of advantaged group members' collective action in support of the disadvantaged.

We also believe they are distinct from meta-beliefs previously explored in relation to attitudes towards intergroup inequality; such as meta-warmth and meta-competence (Phelps, 2003), in important ways. As opposed to the global meta-warmth and meta-competence, the meta-beliefs of interest in the current studies are concretely rooted in the existing inequality between the two groups. We therefore reasoned that ally, inactive, and responsible meta-

beliefs would be distinct from meta-warmth and meta-competence, and that their role in shaping solidarity would warrant special attention.

Specifically, we hypothesized that White Americans' endorsement of these three meta-beliefs would have differential relationships with their willingness to participate in collective action on behalf of Black Americans. The *ally* meta-belief not only portrays the advantaged group in a positive light, but also directly includes them in the collective action against racial inequality. Thus, we expected that if advantaged group members believe the disadvantaged think of them as allies, they might have greater willingness to participate in solidarity-based collective action in support of the disadvantaged.

In contrast, if advantaged group members believe that the disadvantaged think of them as *inactive* in the struggle against inequality, or *responsible* for their (disadvantaged) plight - both negative meta-beliefs - they might be more *or* less willing to participate in solidarity-based collective action. In line with the prior research on negative meta-beliefs, the relationships between the inactive and responsible meta-beliefs and collective action tendencies should depend on whether they trigger feelings of group-based guilt and a collective obligation to act on one hand or, a sense of unfairness on the other. Indeed, group-based guilt has been shown to promote willingness to engage in a range of conciliatory intergroup behaviors (e.g., Brown & Cehajic, 2008; Figueiredo et al., 2010). Conversely, group members have also been shown to react defensively in response to the feeling that they are being unfairly cast in a negative light (e.g., Kteily & Bruneau, 2015). We argue that the extent to which advantaged group members identify with their group should moderate these divergent implications of responsible and inactive meta-beliefs.

The Moderating Role of Ingroup Identification

A large literature examining social identification has consistently shown that individuals are motivated to defend their group to the extent that they identify with it (e.g., (Branscombe et al., 1999). Since high identifiers are motivated to uphold a positive ingroup

image (Doosje & Branscombe, 2003; Doosje et al., 2006), they tend to justify or even deny the wrongfulness of their groups' actions to protect their identity (e.g., Bilali et al., 2012; Li et al., 2019; Lowery et al., 2007). Low identifiers, by contrast, tend to be more ingroup critical, experience more group-based guilt, and are therefore more likely to react in a compensatory manner in response to negative portrayals of the ingroup (e.g., Doosje et al., 2006; Klein et al., 2011; Roccas et al., 2006).

In the current research, we focused on White identification as the relevant social identification that might moderate the associations between negative meta-beliefs and solidarity-based collective action tendencies. We expected the extent to which our White participants identify with White Americans to modulate the downstream processes from the inactive and responsible meta-beliefs. We hypothesized that among low identifiers, endorsing inactive and responsible meta-beliefs would be linked to higher collective action tendencies, explained by perceived collective guilt and obligation to act against racial inequality. Among high White identifiers, conversely, endorsing inactive and responsible meta-beliefs would be linked to lower collective action tendencies, explained by perceived unfairness. The conceptual model is displayed in Figure 1 (see below, Study 2). Furthermore, we expected that endorsing an ally meta-belief would be positively associated with collective action tendencies, regardless of White identification.

Overview of Current Research

In the two studies presented here, we tested whether the meta-beliefs regarding allyship, inactivity, and responsibility were distinct (1) from participants' own beliefs regarding the extent to which White Americans are allies, inactive, or responsible (Study 1), (2) from the more global and previously investigated concepts of meta-competence and meta-warmth (Study 2), and (3) from each other (Studies 1 and 2). Based on these preparatory analyses, we then examined how the meta-beliefs of interest differentially predicted solidarity-based collective action among White Americans, and whether White identification

moderated these relationships (Studies 1 and 2). Moreover, we investigated whether feelings of collective guilt and obligation to act explained the positive relationships between negative meta-beliefs and willingness to act among low White identifiers, and whether perceived unfairness explained their negative relationships among high White identifiers (Study 2, preregistered, materials can be found on OSF).

This research therefore makes multiple contributions. We examined a novel set of meta-beliefs, which we argue are highly relevant to solidarity-based collective action. In doing so, we shed light on the importance of the meta-level as a crucially missing piece for understanding solidarity-based collective action. We also aimed to extend prior research on ingroup identification, by testing its role in moderating the implications of meta-beliefs.

Study 1

The main goals of the study were twofold. First, we set out to examine whether the meta-beliefs regarding allyship, inactivity, and responsibility were distinct from each other, and from participants' own beliefs. Second, we investigated how these meta-beliefs differentially predicted collective action tendencies among White Americans, and whether White identification moderated these relationships. We expected that endorsing an ally meta-belief would be positively associated with collective action tendencies, regardless of White identification. We also expected that among low White identifiers, endorsing inactive and responsible meta-beliefs would be linked to higher collective action tendencies. Among high identifiers, conversely, endorsing inactive and responsible meta-beliefs would be linked to lower collective action tendencies.

Method

Participants. An a priori power analysis using G*Power (Faul et al., 2007) showed that 266 participants in total should provide sufficient power (1-ß = .80) for detecting an

interaction effect of medium effect size[1] (i.e., $f = .25$; Cohen, 1969) at a critical alpha level of .05.

The sample consisted of 304 White Americans. Participants were sampled via Amazons' Mechanical Turk using the panel option to ensure two sets of inclusion criteria, (1) White/Caucasian, and (2) U.S. citizens or permanent residents of the U.S. Our screening of the data resulted in the exclusion of the data of 15 participants who self-reported to be either not White/Caucasian or not U.S. citizens or permanent residents of the U.S., and of 16 who did not pay sufficient attention (indicated by their incorrect answers to the attention check questions[2]).

Our final sample consisted of 273 participants (60% women; age $M = 40.00$, $SD = 13.01$, range = 19-73).

Procedure and Measures. Participants were invited to take part in a survey about social issues in the United States. After consenting to participate in the study, they completed the following measures in the order presented below. All items were measured on 9-point visual analogue scales.

Meta-beliefs and beliefs.

Meta-beliefs. Participants were randomly presented with 18 meta-belief items. They were asked to indicate how likely or unlikely (1 = *not likely at all*; 9 = *very likely*) they thought it was that *most Black people in the U.S.* would hold the following beliefs about

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[1]To our knowledge, there are no previous studies exploring an association between intergroup meta-beliefs and collective action tendencies. The closest relevant result is arguably that of Figueiredo et al. (2010), who reported a correlation of |.22| (corresponding to f = .23) between meta-perceptions and intentions to compensate for past colonial conflict.

[2] 2 At two separate points in each study; once in the middle and once towards the end, we inserted attention check items that looked identical to the other items of the survey, but asked participants "Please move the slider to the extreme left (Not likely at all) for this question" and "Please move the slider to the extreme right (Very likely) for this question." We also asked participants to indicate, at the end of the study, how attentive they were while taking the survey, how seriously they took the survey, and whether they were distracted while taking the survey. Full exclusion criteria based on attention checks can be found on OSF.

White people. Six items captured each of the three meta-beliefs of interest respectively: the *ally* meta-belief (e.g., "In general, Black people believe that White people have been an important force in the movement against discrimination;" "In general, Black people believe that White people have been active participants in the movement against discrimination;" α = .91), the *inactive* meta-belief (e.g., "In general, Black people believe that White people are largely silent regarding Anti-Black discrimination in the U.S.;" "In general, Black people believe that White people are typically inactive when it comes to the struggle for racial equality;" α = .93), and the *responsible* meta-belief (e.g., "In general, Black people believe that White people contribute to Anti-Black discrimination;" "In general, Black people believe that White people are responsible for the struggles faced by the Black community;" α = .89).

   Beliefs. In random order, participants were presented with 18 belief items corresponding to the 18 meta-beliefs. They were asked to indicate how much they *personally* agreed or disagreed (1 = *strongly disagree*; 9 = *strongly agree*) with the following statements. Each statement was identical to a meta-belief item, but "In general, Black people believe that…" was substituted with "In general I believe that...". The resulting scale included six items capturing the ally belief (α = .78), the inactive belief (α = .97), and the responsible belief (α = .95).

   Collective action. Adapted from Selvanathan and colleagues (2018), five items measured participants' willingness to engage in different forms of collective action against racial injustice (e.g., For each of the following actions, please indicate how willing you are to engage in it in the future: Attend demonstrations, protests, or rallies against racial injustice alongside Black people). A composite score for collective action tendencies was formed by averaging across all five items (α = .88).

   White identification. Adapted from Leach et al.'s (2008) multidimensional model, seven items measured two dimensions, centrality and importance, of White identification.

When factor analyzed, all items loaded onto one factor. We therefore created a composite score for White identification combining both dimensions (e.g., "Being a White person is an important part of how I see myself" and "I am glad to be White;" α = .91).

Results

Preparatory analyses.

As a preparatory step, we first aimed to demonstrate that the meta-beliefs of interest (1) can be meaningfully distinguished from White participants' own beliefs about their ingroup's role as allies or inactive in the fight against racial inequality, and as responsible for racial inequality, and (2) can be meaningfully distinguished from each other. To do that, we conducted a series of confirmatory factor analyses (CFAs)[3] first on all the meta-belief and belief items, then on all the meta-belief items. Maximum Likelihood Estimation was used to estimate model parameters. Full results including item loadings and factor correlations are provided in the supplementary materials.

To scrutinize whether meta-beliefs were distinct from beliefs, as we predicted, we tested two alternative measurement models for the meta-belief and belief items. First, we tested a model specifying three correlated latent factors, with the meta-belief and belief items of one type (i.e., ally, inactive, and responsible, respectively) loading together onto one factor. The model fit was not acceptable, $\chi^2(591) = 6247.03$, $p < .001$; RMSEA = .19, SRMR = .27, CFI = .93. Next, we tested a model with six latent factors in which the meta-belief items of each type (i.e., ally, inactive, and responsible) and the belief items of each type loaded onto separate factors. This model yielded an acceptable fit, $\chi^2(579) = 1084.56$, $p < .001$; RMSEA = .06, SRMR = .05, CFI = .95.

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[3] We also conducted exploratory factor analyses (EFAs), first on all the meta-belief and belief items, then on all the meta-belief items. Full results of the EFAs are provided in the supplementary materials.

To scrutinize whether ally, inactive, and responsible meta-beliefs were distinct from one another, we tested two alternative measurement models for the meta-belief items. First, we tested a model specifying two correlated latent factors in which the positive (i.e., ally meta-belief) and negative (i.e., inactive and responsible) meta-beliefs loaded onto separate factors. The model fit was not acceptable, $\chi^2(134) = 423.32$, $p < .001$; RMSEA = .09, CFI = .93, although it did meet the SRMR criterion, SRMR = .05. Next, we tested a model with three latent factors in which the meta-belief items of each type (i.e., ally, inactive, and responsible) loaded onto separate factors. This model yielded an acceptable fit, $\chi^2(132) =$ 283.16, $p < .001$; RMSEA = .06, SRMR = .04, CFI = .96.

Main analyses.

Means, standard deviations, and bivariate correlations between our variables are reported in Table 1.

Table 1: *Means, standard deviations, and bivariate correlations between variables of interest*
Note. *p < .01; **p < .001.

To test our main hypotheses, we conducted three moderated regression analyses using

	Mean (SD)	Inactive MB	Ally MB	White ID	CA
Responsible MB	7.29 (1.33)	.79**	-.61**	-.02	.06
Inactive MB	6.99 (1.51)	1	-.70**	.02	.06
Ally MB	3.91 (1.69)		1	-.05	.11
White identification	5.31 (1.92)			1	-.27**
Collective action tendencies	5.06 (2.20)				1

PROCESS (Hayes, 2018, Model 1) with 5000 bootstrap samples and 95% confidence intervals. In each analysis, we entered ally, inactive, or responsible meta-belief as the respective predictor, collective action tendencies as the outcome, and White identification as a continuous moderator. The predictor and the moderator were both mean centered. When the

interaction between the meta-belief and White identification was significant, we conducted simple slope analyses[4].

Ally meta-belief. The overall model was significant, $F(1, 273) = 9.18$, $p < .001$, $R^2 = .09$. Ally meta-belief did not significantly predict collective action tendencies, $b = 0.15$, $SE = .08$, CI95 [-.004 .296]. There was no significant interaction between ally meta-belief and White identification, $b = 0.04$, $SE = .04$, CI95 [-.026 .113]. White identification negatively predicted collective action tendencies, $b = -0.30$, $SE = .07$, CI95 [-.433 -.168].

Inactive meta-belief. The overall model was significant, $F(1, 273) = 10.46$, $p < .001$, $R^2 = .10$. Inactive meta-belief did not significantly predict collective action tendencies, $b = 0.05$, $SE = .08$, CI95 [-.116 .218]. As hypothesized, there was a significant interaction between inactive meta-belief and White identification in predicting collective action tendencies, $b = -0.10$, $SE = .04$, CI95 [-.180 -.030] (see Figure 2). As expected, inactive meta-belief positively predicted collective action tendencies among those *low* (i.e., 1 SD *below* the mean) on White identification, $b = 0.25$, $SE = .11$, CI95 [.043 .459]. In contrast, inactive meta-belief did not predict collective action tendencies among those *high* (i.e., 1 SD *above* the mean) on White identification, $b = -0.18$, $SE = .18$ CI95 [-.425 .069]. White identification negatively predicted collective action tendencies, $b = -0.30$, $SE = .07$, CI95 [-.432 -.170].

Responsible meta-belief. The overall model was significant, $F(1, 273) = 13.27$, $p < .001$, $R^2 = .13$. Responsible meta-belief did not significantly predict collective action tendencies, $b = 0.07$, $SE = .09$, CI95 [-.113 .245]. As hypothesized, there was a significant interaction between responsible meta-belief and White identification in predicting collective action tendencies, $b = -0.17$, $SE = .04$, CI95 [-.259 -.088] (see Figure 3). As expected, responsible meta-belief positively predicted collective action tendencies among those *low* on

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[4] We also tested all three models while entering each corresponding belief as a covariate. The patterns of results were largely consistent with those reported here. The full results are reported in the supplementary materials.

White identification, $b = 0.40$, $SE = .12$, CI95 [.150 .642]. Conversely, responsible meta-belief negatively predicted collective action tendencies among those *high* on White identification, $b = -0.31$, $SE = .13$ CI95 [-.568 -.058]. White identification again negatively predicted collective action tendencies, $b = -0.29$, $SE = .07$, CI95 [-.422 -.165].
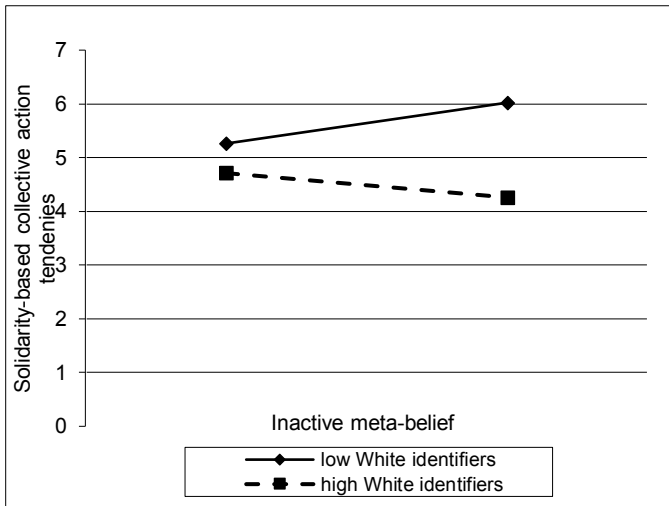

Figure 2: Graph depicting the moderating role of White identification on the link between inactive meta-belief and collective action tendencies
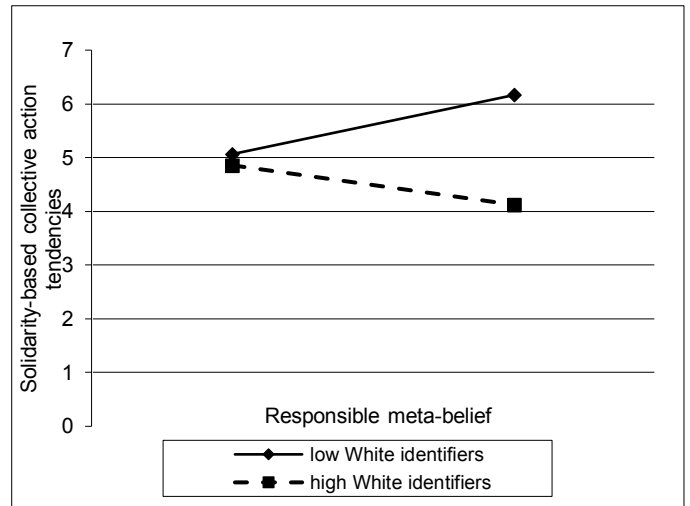

Figure 3: Graph depicting the moderating role of White identification on the link between responsible meta-belief and collective action tendencies

Discussion

In this first study, set in the context of racial inequality in the U.S., we investigated the relationships between three meta-beliefs that White Americans could hold: allyship, inactivity, and responsibility, and their solidarity-based collective action tendencies, while testing the moderating role of White identification. Our preparatory analyses indicated that ally, responsible, and inactive meta-beliefs were partially overlapping, yet psychologically distinguishable from participants' own corresponding beliefs, and that they were meaningfully distinguishable from one another. Moreover, results of our main analyses were partially consistent with our predictions. As hypothesized, inactive and responsible meta-beliefs predicted collective action tendencies, and the direction critically depended on White identification as moderator. Among individuals who did not strongly identify as White, inactive and responsible meta-beliefs were positively associated with collective action

tendencies. This was in line with our expectation of non-defensive and compensatory mechanisms among this subgroup. Conversely, among individuals who strongly identified as White, responsible meta-belief was negatively associated with collective action tendencies. This was in line with our expectation of defensive mechanisms among this subgroup. Surprisingly, inactive meta-belief did not significantly predict collective action tendencies among high identifiers. Also, inconsistent with our prediction, ally meta-belief was not significantly associated with collective action tendencies. Both of these associations, however, were in the predicted directions (negative and positive, respectively). We thus tested our hypotheses regarding these relationships again in Study 2.

Study 2

In this second study, we set out to replicate the distinctions between ally, inactive, and responsible meta-beliefs, and to examine whether they are distinct from the more global and previously investigated meta-warmth and meta-competence. As in Study 1, we again tested our hypotheses regarding the links between the three meta-beliefs of interest and solidarity-based collective action among White Americans, including the moderating role of White identification. In addition to replicating Study 1, we also examined the psychological mechanisms underlying the relationships between inactive and responsible meta-beliefs on one hand, and collective action tendencies on the other. We expected that among low White identifiers, endorsing inactive and responsible meta-beliefs would be linked to higher collective action tendencies via perceived collective guilt and obligation to act against racial inequality. Conversely, among high White identifiers, endorsing inactive and responsible meta-beliefs would be linked to lower collective action tendencies via perceived unfairness. Finally, we again tested the hypothesis that endorsing ally meta-belief would be positively associated with collective action tendencies, regardless of White identification.

Method

Participants. We conducted a power simulation using the software R, using parameters from Study 1. The simulation suggested that a sample size of 400 participants would be adequate (critical alpha .05; $1-\beta > .80$).

Four hundred and seven participants were recruited via Amazons' Mechanical Turk using the same inclusion criteria as in Study 1. Our screening of the data resulted in the exclusion of the data of 19 participants who self-reported to be either not White/Caucasian or not U.S. citizens or permanent residents of the U.S., and of 14 who did not pay sufficient attention (indicated by their incorrect answers to the attention check questions).

Our final sample consisted of 375 participants (60% women; age $M = 41$, $SD = 12.56$, range = 19-74).

Procedure and measures. Participants followed the same procedure as in Study 1 and completed the following measures in the order presented below, unless specified otherwise. All items were measured on 9-point visual analogue scales.

Meta-warmth and meta-competence. Participants were asked to indicate how likely they thought that most Black people in the U.S. would hold a number of beliefs about White people. Derived from the Stereotype Content Model (Fiske, 1998), four items tapped into meta-warmth (e.g., "In general, Black people believe that White people are kind;" $\alpha = .97$) and four items tapped into meta-competence (e.g., "In general, Black people believe that White people are intelligent;" $\alpha = .95$).

Meta-beliefs. Participants were presented with 9 meta-belief items, in random order, taken from Study 1. Three items captured each of the three meta-beliefs of interest; the ally meta-belief ($\alpha = .83$), the inactive meta-belief ($\alpha = .86$), and the responsible meta-belief ($\alpha = .88$).

Mediators

The presentation order of the mediators was counterbalanced, such that participants were randomly assigned to either respond first to the items measuring the non-defensive

mediators (i.e., collective guilt, obligation to act) and then the defensive mediator (i.e., unfairness); or vice versa.

Collective guilt. Adapted from Branscombe and colleagues (2004), three items measured participants' collective guilt (e.g., "I feel guilty about White Americans' harmful actions toward Black Americans;" α = .90).

Obligation to act. Collective obligation to act was measured using three items asking participants how much they felt that White Americans have a collective obligation to take action against racial inequality (e.g., "I believe that White Americans should act together against Anti-Black discrimination;" α = .94).

Unfairness. Adapted from Sullivan and colleagues (2012), unfairness was measured using three items (e.g., "It is unfair if people think that just because I'm a White American, I should feel guilty for the suffering of Black Americans;" α = 85).

Collective action. The same five items from Study 1 measured participants' willingness to engage in collective action against racial injustice (α = .90).

White identification. The same seven items from Study 1 measured participants' White identification (α = .88).

Results

Preparatory analyses.

As a preparatory step, we first aimed to replicate the distinctions between ally, inactive, and responsible meta-beliefs, and to additionally examine whether these meta-beliefs were distinct from the more global and previously investigated meta-warmth and meta-competence. Full results of CFAs[5] are provided in the supplementary materials.

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[5] We also conducted exploratory factor analyses (EFAs), first on all the meta-belief, then on all the meta-belief items and meta-warmth and meta-competence. Full results of the EFAs are provided in the supplementary materials.

With the items of ally, inactive, and responsible meta-beliefs, we tested the same two models as in Study 1. Again, the model with positive items (i.e., ally meta-beliefs) and negative items (i.e., inactive and responsible meta-beliefs) loading onto two latent factors, did not yield acceptable fit, $\chi^2(26) = 180.92$, $p < .001$; RMSEA = .13, CFI = .93, although it did meet the SRMR criterion, SRMR = .06. The model with the meta-belief items of each type (i.e., ally, inactive, and responsible) loading onto separate factors, however, yielded an acceptable fit, $\chi^2(24) = 78.01$, $p < .001$; RMSEA = .08, SRMR = .05, CFI = .97.

To scrutinize whether ally, inactive, and responsible meta-beliefs were distinct from the previously studied meta-warmth and meta-competence, we tested a model with five latent factors, and items of meta-ally, meta-inactive, meta-responsible, meta-warm, and meta-competence loading onto a separate factor. This model yielded an acceptable fit, $\chi^2(109) = 224.37$, $p < .001$; RMSEA = .05, SRMR = .04, CFI = .98.

Main analyses.

Means, standard deviations, and bivariate correlations between our variables are reported in Table 2.

Table 2: *Means, standard deviations, and bivariate correlations between variables of interest*

	Mean (SD)	Inactive	Ally	Collective guilt	Obligation to act	Unfairness	White ID	CA
Responsible MB	7.24 (1.48)	.75**	-.50**	.09	.11*	.12*	-.06	.04
Inactive MB	6.94 (1.52)	1	-.54**	.07	.04	.11*	-.04	.02
Ally MB	4.25 (1.75)		1	.10	.08	-.06	.09	.13*
Collective guilt	5.06 (2.54)			1	.55**	-.59**	-.21**	.58**
Obligation to act	7.09 (1.94)				1	-.32**	-.29**	.63**
Unfairness	6.67 (1.82)					1	.28**	-.39**
White identification	5.67 (1.71)						1	-.29**
Collective action tendencies	4.90 (2.37)							1

Note. *p < .01; **p < .001.

To test the relationship between ally meta-belief and collective action tendencies, moderated by White identification, we conducted the same moderated regression as in Study 1 (Hayes, 2018, Model 1). To test our hypotheses that inactive and responsible meta-beliefs

would predict 1) more collective action tendencies via perceived collective guilt and obligation to act among low identifiers, and 2) less collective action tendencies via perceived unfairness via high identifiers, we then conducted two sets of moderated mediation analyses as described below (Hayes, 2018, Model 8). All analyses were conducted using 5000 bootstrap samples and 95% confidence intervals. The predictor and the moderator were again mean centered[6].

Ally meta-belief. The overall model was significant, $F(1, 375) = 15.74$, $p < .001$, $R^2 = .11$. As we expected, ally meta-belief positively predicted collective action tendencies, $b = .21$, $SE = .07$, CI95 [.075 .338]. There was no significant interaction between ally meta-belief and White identification, $b = 0.04$, $SE = .03$, CI95 [-.030 .104]. In addition, White identification negatively predicted collective action tendencies, $b = -0.42$, $SE = .07$, CI95 [-.554 -.286].

Next, we tested the indirect effects of inactive and responsible meta-beliefs on collective action tendencies via collective guilt and obligation to act, moderated by White identification. In each model, inactive or responsible meta-belief was introduced as the predictor, collective guilt and obligation to act as parallel mediators, identification as the moderator, and collective action tendencies as the outcome (Hayes, 2018, model 8). Results of these moderated mediations are summarized in Table 3.

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[6] We also tested all five models while entering meta-warmth and meta-competence as a covariate. The patterns of results are largely consistent with those reported here, with the exception of the indirect effects of inactive and responsible meta-beliefs through unfairness among high identifiers. The full additional results are reported in the supplementary materials.
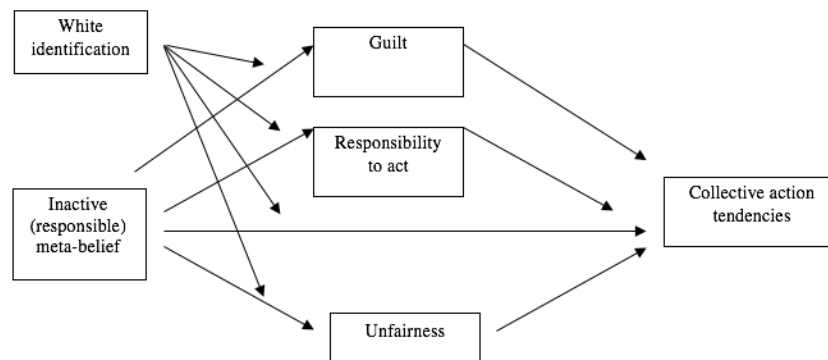
Figure 1: Conceptual model depicting the moderating role of White identification on the link between inactive and responsible meta-beliefs and collective action tendencies

Inactive meta-belief. As hypothesized, the indirect effect of inactive meta-belief on collective action tendencies through collective guilt and obligation to act were both significant among *low* White identifiers. The more strongly low White identifiers held an inactive meta-belief, the more they experienced collective guilt and perceived an obligation to act. In turn, collective guilt and obligation to act both positively predicted collective action tendencies. Among *high* White identifiers, neither of the indirect effects (collective guilt, $b = -.05$, $SE = .07$, CI95 [-.188 .071]; obligation to act, $b = -.02$, $SE = .04$, CI95 [-.108 .043]) was significant.

Responsible meta-belief. As hypothesized, the indirect effects of responsible meta-belief on collective action tendencies through collective guilt and obligation to act were both significant among *low* White identifiers. The more strongly low White identifiers held a responsible meta-belief, the more they experienced collective guilt and perceived a collective obligation to act. In turn, collective guilt and obligation to act both positively predicted collective action tendencies. Among *high* White identifiers, in contrast, neither of the indirect effects (collective guilt, $b = -.01$, $SE = .04$, CI95 [-.096 .061]; obligation to act, $b = -.004$, $SE = .06$, CI95 [-.130 .114]) was significant.

Table 3. *Direct and indirect effects of responsible and inactive meta-beliefs on collective action tendencies through obligation to act and guilt among low White identifiers*

	Obligation to act	Guilt
	Coefficient, CI95(LCI, UCI)	Coefficient, CI95 (LCI, UCI)
Responsible MB → Mediator (a)	.27* (.089 .443)	.30* (.063 .538)
Mediator → CA tendencies (b)	.52* (.410, .627)	.30* (.222, .385)
Responsible MB → CA tendencies (c)	.01 (-.160 .171)	
Responsible MB → Mediator → CA tendencies (ab)	.14* (.051 .290)	.09* (.005 .174)
Index of moderated mediation	$b = -.04$ (-.095 .001)	$b = -.03$ (-.059 .004)
Inactive MB → Mediator (a)	.16* (.005 .313)	.26* (.042 .487)
Mediator → CA tendencies (b)	.52* (.410 .628)	.31* (.224 .387)
Inactive MB → CA tendencies (c)	.08 (.188 .120)	
Inactive MB → Mediator → CA tendencies (ab)	.08* (.004 .188)	.08* (.0008 .160)
Index of moderated mediation	$b = -.04$ (-.085 .003)	$b = -.03$ (-.060 .002)

* indicates significant effects at 95% CI

We also tested indirect effects of inactive and responsible meta-beliefs on collective action tendencies via perceptions of unfairness, moderated by White identification[7]. We again conducted two moderated mediation analyses where inactive and responsible meta-beliefs were respectively introduced as the predictor, unfairness as a mediator, identification as a

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[7] We also tested the full model displayed in Figure 1, where we tested the indirect effects of inactive and responsible meta-beliefs, separately, on collective action tendencies via collective guilt, obligation to act, and unfairness as parallel mediators, moderated by White identification. The indirect effects of inactive and responsible meta-beliefs on collective action tendencies via collective guilt and obligation to act among low White identifiers were significantly positive. The indirect effects of inactive and responsible meta-beliefs on collective action tendencies via unfairness among high White identifiers were non-significant, but in the expected negative direction.

moderator, and collective action tendencies the outcome (Hayes, 2018, model 8). Results of these moderated mediations are summarized in Table 4.

Inactive meta-belief. As hypothesized, the indirect effect of inactive meta-belief on collective action tendencies through unfairness was significantly negative among *high* White identifiers. This indirect effect indicates that high White identifiers' endorsement of an inactive meta-belief predicted more perceived unfairness, which in turn predicted less willingness to engage in collective action. The indirect effect of inactive meta-belief on collective action tendencies through unfairness, by contrast, was not significant among *low* White identifiers, $b = -.03$, $SE = .04$, CI95 [-.107 .037].

Responsible meta-belief. As hypothesized, the indirect effect of responsible meta-belief on collective action tendencies through unfairness was significantly negative among *high* White identifiers. This indirect effect indicates that high White identifiers' endorsement of a responsible meta-belief predicted more perceived unfairness, which in turn predicted less willingness to engage in collective action. The indirect effect of responsible meta-belief on collective action tendencies through unfairness, by contrast, was not significant among *low* White identifiers, $b = -.05$, $SE = .04$, CI95 [-.144 .020].

Table 4. *Direct and indirect effects of responsible and inactive meta-beliefs on collective action tendencies through unfairness among high White identifiers*

	Unfairness
	Coefficient, CI95(LCI, UCI)
Responsible MB → Unfairness (a)	.16* (.040, .281)
Unfairness → CA tendencies (b)	-.44* (-.554, -.324)
Responsible MB → CA tendencies (c)	.64* (.213, 1.072)
Responsible MB → Unfairness → CA tendencies (ab)	-.10* (-.212, -.016)
Index of moderated mediation	b = -.01 (-.048 .024)
Inactive MB → Unfairness (a)	.14* (.022, .255)
Mediator → CA tendencies (b)	-.44* (-.554 -.324)
Inactive MB → CA tendencies (c)	.35 (-.086 .794)
Inactive MB → Unfairness → CA tendencies (ab)	-10* (-.203 -.014)
Index of moderated mediation	b = -.02 (-.049 .013)

*indicates significant effects at 95% CI.

Discussion

In this study, results of the factor analyses replicated the factor structure of the three meta-beliefs that we found in Study 1, suggesting again that they are meaningfully distinguishable from each other. Additionally, they also lent support to our argument that ally, inactive, and responsible meta-beliefs are distinct from meta-warmth and meta-competence, two intergroup meta-perceptions frequently examined in previous research.

Furthermore, our main analyses provided consistent support for our hypotheses. In line with our prediction, we found a significant positive association between endorsement of the ally meta-belief and collective action tendencies, regardless of identification. We also found evidence for our hypothesis that perceived collective guilt and obligation to act would

explain the positive association between inactive and responsible meta-beliefs on one hand, and collective action tendencies on the other, among *low* White identifiers. In other words, among individuals who weakly identified as White, endorsing an inactive or a responsible meta-belief positively predicted their experiences of guilt and their feeling that White Americans had an obligation to act to redress racial inequality. These in turn predicted their higher willingness to engage in solidarity-based collective action. Conversely, also as expected, a sense of unfairness explained the negative associations between inactive and responsible meta-beliefs on one hand, and collective action tendencies on the other, among *high* White identifiers. In other words, among individuals who strongly identified as White, endorsing an inactive or responsible meta-belief predicted a stronger sense that they were judged unfairly, which in turn predicted their lower willingness to engage in solidarity-based collective action.

General discussion

In the two studies presented here, we extended the research on solidarity-based collective action, by investigating the role of advantaged group members' beliefs about how the disadvantaged group think of them (i.e., intergroup meta-beliefs), in shaping their willingness to engage in action in support of the disadvantaged. We argued that a truly social psychological approach to solidarity-based collective action, which inherently involves working for and with the outgroup, should include the meta-level. Specifically, we reasoned that advantaged group members' meta-beliefs regarding how the disadvantaged view their role in perpetuating and redressing intergroup inequality, predict their collective action tendencies.

In the context of racial inequality in the United States, we examined three meta-beliefs that members of the advantaged group, White Americans, likely hold; allyship, inactivity, and responsibility. The results largely supported our predictions. First, the more White Americans believed that Black Americans think of them as allies in the fight against racial inequality, the

more they were willing to engage in collective action in support of Black Americans, regardless of their level of identification. It might be worth noting that the items we used to measure the ally meta-belief included a mix of past perfect and present tenses. This could have potentially posed an issue for our prediction that the ally meta-belief would positively predict solidarity. The use of past perfect tense might have a moral licensing effect, such that the belief that Black Americans think of them as having contributed to anti-discrimination efforts might reduce White Americans' intentions for future actions. Our results across the two studies, however, showed that it was not the case.

Second, the relationships between inactive and responsible meta-beliefs and collective action were moderated by White identification. Among low White identifiers, the more they believed that Black Americans think of them as inactive in the fight against racial inequality, or responsible for Black Americans' ongoing struggles, the more they felt collective guilt and an obligation to act. This in turn predicted their higher willingness to engage in collective action in support of Black Americans. Among high White identifiers, in contrast, the more they believed that Black Americans think of them as inactive or responsible, the more they felt a sense of unfairness. This in turn predicted their lower willingness to engage in collective action in support of Black Americans. These findings make both theoretical and practical contributions.

Indeed, our findings highlight the importance of considering the meta-perspective in our accounts of solidarity-based collective action, by suggesting that advantaged group members' beliefs regarding what the disadvantaged think of them, substantially contribute to their willingness to engage in solidarity. This opens up an avenue for research on solidarity-based collective action to further investigate a previously ignored set of cognitions; meta-beliefs. We argue that such research can enrich our understanding of how advantaged group members come to decide to engage in collective action in support of a disadvantaged outgroup. While the existing literature has focused on instrumental, emotional, and

ideological predictors of such engagement, it has overlooked its relational nature. Specifically, when the advantaged choose to engage in solidarity, they are participating in an undertaking in support of a group; the disadvantaged, that they do not belong to. Furthermore, this disadvantaged group is potentially in direct contestation with their own (advantaged) group. To respond to the disadvantaged and their challenges to inequality, it is reasonable to assume that the advantaged gauge the disadvantaged's attitudes and beliefs towards them, and what role they are perceived to play in the status quo and its potential change. Our findings indicate that it might be crucial to factor in these perceptions, if we are to fully understand the motivation or hesitation of the advantaged to join solidarity-based collective action. Interestingly, our results suggest that the relationships between the negative intergroup meta-beliefs and solidarity were explained by collective guilt and a sense of obligation to act. These findings suggest that intergroup emotions and cognitions can be triggered by perceptions of what other people think, not just by individuals' own perceptions of a situation. This influence of others' supposed beliefs is arguably a novel demonstration of the "social life of emotions" (Tiedens et al., 2004), highlighting the ways in which people's experience of the world is partially shaped by their understanding of others' experiences.

Our findings also contribute to the literature on meta-beliefs, which has investigated more general intergroup meta-perceptions, such as meta-warmth and meta-competence, rooted in the stereotype content model (Fiske, 1998). We extended this research by examining a new set of meta-beliefs, which are more concrete and relational in nature. Our results suggest that people hold such concrete, relational meta-beliefs, encompassing concepts such as allyship, inactivity in the fight for equality, and intergroup responsibility, and that these meta-beliefs are linked to their collective action tendencies.

Importantly, we also showed that the links between the meta-beliefs and solidarity-based collective action were moderated by ingroup identification. This highlights a third contribution of the current work. It extended the previous research on ingroup identification

as moderating intergroup attitudes and beliefs, to the realm of meta-beliefs. Indeed, ingroup identification has been shown to modulate a large array of intergroup phenomena, such that high identifiers generally tend to be defensive in the face of their groups' wrongdoings, while low identifiers tend to act in compensatory ways (e.g., Bilali et al., 2012). Our findings indicate that this moderating role of ingroup identification also applies to the meta-level. Whether people dealt defensively or in a compensatory manner with their belief that outgroup members think of them negatively, was contingent on how much they identified with their group.

Practical implications

These conceptual links could potentially offer practical recommendations to disadvantaged group members, or activists more generally, who are looking to increase support against intergroup inequality among the ranks of the advantaged. It seems that it is crucial to factor in identification as an important psychological moderator when targeting advantaged group members, perhaps by using different messaging on weakly versus strongly identified individuals. Our results point to the possibility that individuals who do not strongly identify with the advantaged group might be responsive to narratives centering the inactivity or responsibility of their ingroup, while this same messaging might backfire among high identifiers. Interestingly, our results also point to the possibility that strongly identified individuals, along with weakly identified, might be motivated by the portrayal of their ingroup as an integral part of the fight against social inequality. Thus, the findings illuminate important ways in which one type of messaging might lead to both more and less engagement in collective action, depending on the audience.

Limitations and future directions

Several limitations of the current research are also worth mentioning. First, the correlational nature of our data prevents us from making causal claims. It would therefore be useful for future research to attempt to directly manipulate intergroup meta-beliefs to

experimentally test their effects on willingness to engage in solidarity-based collective action. This effort is especially relevant to the previously suggested practical recommendations. While our studies explored the association between personally endorsed meta-beliefs and collective action tendencies, experimental studies can investigate the effects of activating or inducing ally, responsible, and inactive meta-beliefs using tailored messaging. It would be important to explore whether the psychological correlates of advantaged group members' endorsed meta-beliefs, which were the focus of the current work, map onto the consequences of exposing them to information about what the disadvantaged ostensibly think of them.

Second, the three meta-beliefs are clearly not exhaustive, and there might exist others that could be relevant to solidarity-based collective action. For instance, it is plausible that advantaged group members might believe that the disadvantaged think of them as benefiting from the status quo of inequality, as morally unbothered by it, or even as actively supportive of it. Future research, by extending our current findings that concrete and relational meta-beliefs are important for solidarity-based collective action, could explore whether and how other potentially existing meta-beliefs differentially predict solidarity. Importantly, while we conceptually and statistically distinguished between the two negative meta-belief, inactive and responsible, we predicted and showed that they had similar downstream associations with solidarity. Still, we argue that this should not be interpreted as an indication that the relationships between all possible negative meta-beliefs and collective action tendencies should be expected to replicate our findings. The more general negative meta-beliefs that are not rooted in the inequality or relevant for collective action, for example, might not substantially contribute to solidarity-related action tendencies. It would be useful for future research to explore other meta-beliefs that, similar to inactive and responsible, could be particularly relevant for collective action against different forms of injustice.

Third, we can speculate that the intergroup meta-beliefs that are relevant and the extent to which they contribute to shaping solidarity-based collective action might be

dependent on the particularities of the intergroup context under investigation. For example, it seems possible that in situations of protracted conflict, where there is very little positive interaction between groups, the ally meta-belief might be less relevant. Still, responsible meta-belief could potentially promote support for compensatory actions, including solidarity-based collective action, among weakly identified advantaged group members. Future research could explore the role of the meta-level in predicting solidarity-based collective action in a wider array of intergroup contexts, to provide boundary conditions for when we should expect intergroup meta-beliefs to matter for solidarity, and when not. Similarly, we expect the moderating role of identification with the advantaged group to depend on the context and/or the content of identification (e.g., Roccas et al., 2006). For example, the interaction between advantaged identification and different meta-beliefs might be contingent on the norms associated with the identity. If a central aspect of an advantaged identity is a commitment to equality, the expectations derived for high identifiers will likely diverge from our hypotheses. Future studies can explore how various advantaged identities, depending on their intricacies, contribute to shaping the relationship between intergroup meta-beliefs and solidarity. Furthermore, it is worth noting that other inter-individual difference variables, beyond identification with the advantaged, might moderate the links between different meta-beliefs and collective action. Other candidates for future research could be, for example, political orientation or system justification, the latter of which has been shown to explain defensive versus non-defensive attitudes by advantaged group members (Hässler et al., 2019).

Finally, in the current work, we chose to explore the association between the three meta-beliefs and collective action against racial inequality, without specifying to our participants what the exact manifestation of this racial inequality is. Our results are therefore limited to White Americans' collective action tendencies against racial inequality as defined broadly, and cannot, for instance, distinguish between actions organized in response to structural, overt (e.g., blatant racism), or covert (e.g., macroaggressions) instances of

inequality. Future research can refine our results by exploring the potentially differential role of intergroup meta-beliefs in shaping solidarity aimed at responding to different forms of racial inequality.

Conclusion

In sum, across two studies among advantaged group members, we found that the endorsement of an ally meta-belief was positively associated with their collective action tendencies in support of the disadvantaged, although the effect was not large and not significant in Study 1. We also found that among individuals who weakly identify with their ingroup, the more they endorsed an inactive or a responsible meta-belief, the higher their solidarity-based collective action tendencies, and this relationship was explained by their experiences of collective guilt and obligation to act. In contrast, among individuals who strongly identify with their ingroup, the more they endorsed an inactive or a responsible meta-belief, the lower their solidarity-based collective action tendencies, and this relationship was explained by a sense of unfairness. This work demonstrated the importance of the meta-level for our understanding of solidarity-based collective action among the advantaged.

Open Science and Supplementary Materials

Materials for Chapter 1, including preregistration of Study 2, can be found on OSF.

Supplementary materials can be found here.

Chapter 2

A cross-country investigation of political protest predictors:

Exploring the role of macro-level repression

Political protest or collective action is one of the oldest and most central concerns of the social sciences (Van Zomeren et al., 2008). Researchers have indeed been investigating the phenomenon for over a century (Klandermans, 1997). This massive and characteristically multi-disciplinary field of inquiry has broadly aimed to answer two interrelated but distinct questions; namely under which political circumstances and through which individual-level processes political protest occurs (Van Zomeren, 2020).

Historically, the first question, which emphasizes the roles of macro-level variables (i.e., characteristics of the social or political contexts that may (de-)mobilize protest) took center stage for decades (Corcoran, 2011). This exclusive focus on macro-level factors was critiqued as a "structural bias" in social movement research (Diani & McAdam, 2003; Goodwin & Jasper, 1999), and engendered a cross-disciplinary shift around the 1980s, whereby scientists started devoting increasing attention to the second question. This younger tradition investigates micro-level variables (i.e., individual-level (de-)motivators of protest engagement) of political protest (Klandermans, 1997). Importantly, emergent theories from both traditions all implicitly have a macro and micro component (Corcoran, 2011), but the link between the two is often treated as secondary, and only given an 'explanation sketch' (Opp, 2010, pp. 119) rather than a proper expounding. The resulting theoretical terrain is ripe with different perspectives, and strongly inviting for combinatory approaches (Van Zomeren, 2020).

Indeed, for at least a decade now, there have been explicit calls for integration of the macro and micro-levels (e.g., Opp, 2010; Van Zomeren, 2020) in the research on political protest (for an example, see Dalton et al., 2009). In the current work, we aimed to do precisely that, by investigating the potential role that country-level political repression, a macro factor, could play in shaping participation in political protest and its micro-level predictors. Importantly, while most studies on the micro predictors of political protest have been conducted in contexts where repression is low (Van Zomeren, 2020). This has left what we

argue is a large gap in our understanding of what motivates individuals to join political protest in countries with different levels of repression. To fill this gap, we aimed to answer three research questions. First, what is the relationship between country-level political repression and political protest? Second, does country-level political repression play a role in shaping the micro predictors of political protest? And third, does country-level political repression moderate the relationships between political protest on one hand, and its micro predictors on the other?

To answer these questions, we analyzed data from the seventh wave of the World Value Survey (WVS, Haerpfer, 2020), and operationalized macro repression as a country-level characteristic using the political liberties scale from the Varieties of Democracies (V-Dem; Michael et al., 2019) project. The WVS provided us with a unique opportunity to systematically investigate a number of micro-level predictors of political protest, across a wide range of countries, which differ substantially on their levels of repression. In the coming sections, we will first review the literature on micro-level predictors of political protest, then we will revisit the question of how repression influences protest itself. Next, we will elaborate on how repression may influence the micro-level predictors, and finally, their relationships with protest.

Micro-level predictors of political protest

While the literature on micro-level motivators of protest has explored a plethora of variables, the following review specifically focuses on those streams that are relevant for the predictors of political protest that we employed from the WVS. The resulting list of micro-level predictors; political dissatisfaction, efficacy, organizational, and informational embeddedness covers extensive theoretical ground, and, we argue, allows us to (re-)investigate two main pathways to political protest found in the literature; that is the grievance-based path and the instrumental path.

Grievance-based path

Political dissatisfaction. Perhaps the most straightforward and well-researched predictor of political protest is the perception of societal issues and citizen dissatisfaction (Dalton et al., 2009). This notion that political dissatisfaction; which captures a sort of grievance, can mobilize individuals into protest behavior is derived from grievance-based theories of mobilization (e.g., Relative Deprivation Theory, see Walker & Smith, 2002), and is echoed across social science research on political protest. Indeed, sociologists (e.g., Wilkes, 2004), political scientists (e.g., Inglehart, 1977), and social psychologists (see Van Zomeren et al., 2008), have all found that different forms of dissatisfaction (e.g., economic, political, etc.) are strong predictors of political protest. The basic idea is that individuals have a broad range of needs, and a shortage of any of these can potentially propel them into protest (for a discussion of these needs, see Inglehart, 1977). We therefore expected political dissatisfaction to positively predict political protest (*H1a*).

Instrumental path

Efficacy. Setting the stage for another central predictor of protest, instrumental approaches suggested the availability of resources as an additional and crucial antecedent (see Resource Mobilization Theory; Gamson, 1975; Oberschall, 1973; Tilly, 1978). While early theorizing on instrumental explanations of protest focused on objective, structural resources (e.g. McCarthy & Zald, 1977), a shift towards investigating *efficacy*; broadly capturing the subjective experience of resource availabilies, followed (e.g. Klandermans, 1984). Research has conceptualized and operationalized efficacy at different levels, and has shown that people are more prone to protest when they feel individually (e.g., Klandermans et al., 2008) or collectively (e.g. Mummendey et al., 1999) efficacious, and when they feel like their own participation is important for the success of the relevant political action (i.e., participative efficacy, e.g., Zomeren et al., 2013). Efficacy has also been studied in various ways, including (1) efficacy as a broad locus of control (Gecas, 1989; Rotter, 1966); (2) task-specific efficacy (Sampson et al., 2005); and (3) political efficacy (Corning & Myers, 2002).

Across the board, these different streams of research have shown that more efficacious individuals are more likely to engage in collective action. We therefore hypothesized that efficacy would positively predict political protest (*H1b*).

Organizational embeddedness. In this same instrumental tradition, research has provided evidence that "individuals embedded in organizations are more likely to participate in political activity" (Schussman & Soule, 2005, p. 1099). Indeed, embeddedness, broadly conceptualized as involvement in collectives or civil society organizations (Klandermans et al., 2008), has been shown to predict participation in politics including voting and, more relevant to the current research, protesting (Klandermans et al., 2008; Paxton, 2002; Tillie, 2004). The broad idea here is that belonging to collectives provides individuals with the resources necessary for mobilization (Almond and Verba, 1965). At the same time, we thought it possible that membership in certain (status-quo enhancing) collectives could be encouraged by repressive states, so that the relationship between repression and social embeddedness would actually be reversed. We therefore had competing hypotheses regarding the relationship between organizational embeddedness and political protest; specifically, that organizational embeddedness could positively (*H1c*) or negatively (*H1c'*) predict protest.

Informational embeddedness. Another predictor of political protest that we derived from political science research, is what we term informational embeddedness. Political scientists have long posited that informational environments may be crucial in predicting individuals' participation in protest (Little, 2016), and more recently, have allocated large attention to the question of whether and how social media, specifically, fuels dissent (e.g., Christensen & Garfias, 2018). The underlying theoretical claim is that access to different informational channels can increase the likelihood of protest through, among other potential mechanisms, a decrease in coordination costs between potential protest participants (Enikolopova et al., 2018). This positions informational embeddedness as a factor that

provides resources (or decreases the need for them) for mobilization. We therefore hypothesized that informational embeddedness would positively predict political protest (*H1d*).

In sum, by drawing on micro-level research across the social sciences and identifying measures available in the WVS, we investigated the roles of four individual-level motivators of protest, and we expected political dissatisfaction, efficacy, and informational embeddedness, to all positively predict political protest, and we explored the role of organizational embeddedness. Crucially, this list of four predictors – while admittedly not exhaustive – is derived from a wide range of theoretical approaches, and covers two central and heavily researched pathways to political protest (see Van Zomeren, et al., 2012). First, our political dissatisfaction measure captures the grievance path to political protest, which broadly emphasizes the experiences of deprivation. Second, our efficacy, organizational, and informational embeddedness measures capture the instrumental path to political protest, which emphasizes the importance of resources; both subjective and objective (Van Zomeren et al., 2008).

Impact of repression on protest

The concept of political repression has been of interest to researchers in multiple fields of inquiry across the social sciences. These different disciplines have tended to center on different aspects of repression (see Earl, 2011). While political scientists have explored repression as a structural or institutional closing of political opportunities (e.g., Kitshelt, 1996), sociologists tend to study repression as "actions directed at individuals and groups based on their current or potential participation in non-institutional efforts for social, cultural, or political change" (p. 261, Earl, 2011; Davenport, 2007), and social psychologists have zoomed in on perceptions of such repressive actions (e.g., Ayanian & Tausch, 2016).

Importantly, the different approaches to repression share a focus on phenomena meant to

"prevent, control, or constrain non-institutional collective action (e.g., protest), including its

initiation" (p. 263, Earl, 2011).

Different disciplines have also broadly sought to understand whether and how political

repression affects protest, and have accumulated evidence for multiple possible relationships.

These include simple deterring or mobilizing effects (Earl, 2003, 2011), and more complex

patterns described as a U-curve (i.e., deterring until a certain point, then mobilizing;

Koopmans, 1997) or an inverted U-curve (i.e., mobilizing until a certain point, then deterring;

Stockemer, 2012), for instance. Such seemingly contradictory results illustrate what has been

referred to as the *repression paradox* (see Kurtz & Smithey, 2018), the gist of which is the

following: repression seems to sometimes quell, and other times fuel protest (Earl 2003,

2011). Indeed, both of these potential directions for the relationship between repression and

protest have been theorized and empirically supported.

Resource Mobilization Theory (see Gamson, 1975; Oberschall, 1973; Tilly, 1978) for

instance, by emphasizing the role of opportunity structures, predicts that repression should

reduce protest, given that it closes such structures and disrupts the resources of social

movements and their ability to mobilize. To demonstrate this effect, Corcoran and colleagues

(2011), using a large cross-national sample, operationalized the openness of opportunity

structures with a combination of indices including, for example, (long) history of democracy,

and (high) women's political representation. Their results showed that, as expected, in

countries where political opportunity structures were more closed, levels of collective action

were significantly lower (Corcoran et al., 2011). In their study, protest indeed ranged from its

lowest in Zimbabwe, the country characterized with the most closed opportunity structures in

the sample, to its highest in Sweden, the country characterized with the most open. In a

similar direction, economic approaches to protest, such as rational actor models of collective

action (Oslon, 1965), which emphasize cost-benefit analyses, predict that repression should

have a deterring effect on political protest, because it produces disincentives for potential participants.

In contrast, however, grievance-based theories of protest predict that repression can engender a mobilizing effect, by amplifying a sense of illegitimacy or injustice among potential participants (e.g., Relative Deprivation Theory; see Walker & Smith, 2002). Relatedly, there exists a social psychological body of work demonstrating that, in the presence of a social movement, individuals' expectation that a certain action of theirs is going to be repressed seems to be a mobilizing factor (see Abi Ghannam 2017). For instance, in the context of German anti-nuclear power actions, Opp and Roehl (1990) showed that larger expectations of police brutality predicted higher willingness to engage in protest. Similarly, and in the context of the post-coup uprising in Egypt, Ayanian and Tausch (2016) provided evidence that the more movement participants believed they were likely to be arrested, injured, or killed, the more they were willing to join future protests.

In the current work, we focused on repression as a long-standing characteristic of a country, which structurally inhibits freedom of association and expression. We therefore suggest that Corcoran et al.'s findings (2011); that closed opportunity structures seem to lower overall levels of protest, were the most relevant to inform our hypothesis regarding the direct relationship between structural repression and protest. Indeed, while some of the studies cited above showed that perceptions and experiences with repression in the context of a social movement can have a protest-fueling effect, we reasoned that at the country-level, repression is likely to involve a tightening of political opportunities, and to therefore have an overall negative relationship with political protest (*H2*).

Impact of repression on micro-level predictors of protest

Following our investigation of how country-level repression relates to overall levels of political protest, we also sought to explore how repression might influence factors that typically predict protest. This endeavor is in line with the underlying logic of Opp's (2010)

Structural Cognitive Model, which argues that macro-level variables partially shape the micro-level predictors relevant for engagement in protest. Within this framework, we reasoned that the contradictory findings on the relationship between repression and protest, might have arisen because repression – in addition to its direct negative relationship with protest in this case – can influence multiple paths to dissent, some of which account for its deterring, and others for its potentially mobilizing effects. Indeed, various theories and approaches have respectively emphasized these two sets of consequences associated with repression. The following exposition will focus on our four micro-level predictors, and how we expected them to be influenced by country-level repression.

Political dissatisfaction. Regarding *political dissatisfaction*, political science research has shown that there is a positive relationship between actual levels of governments repression and individuals' evaluations of repressive conditions in their country (e.g., Anderson et al., 2002). This suggests that higher levels of repression could predict higher levels of dissatisfaction. In a similar direction, sociological research on social movements has shown that the experience of repression increases levels of discontent (Opp & Roehl, 1990), and social psychological studies have demonstrated that increased likelihood of repression raises levels of outrage at the state (Ayanian & Tausch, 2016; Ayanian et al., 2021). These explanations are congruent with grievance-based approaches to protest (see Wright et al., 1990), which conceptualize experiences with repression as an injustice that itself could mobilize action (Koopmans, 1997). Alternatively, however, some social psychological work has suggested that people may be more motivated to justify the systems they live in when they feel more dependent on or controlled by the authorities that govern over these systems (see System Justification Theory, e.g., Jost et al., 2015). This suggests that individuals in countries with higher repression could actually report less dissatisfaction. We therefore formulated competing hypotheses, to explore whether repression increases (*H3a*) or decreases (*H3a'*) political dissatisfaction.

Efficacy. When it comes to *efficacy*, the effect of repression is also not straightforward. On the one hand, Corcoran and colleagues (2011) have argued and demonstrated that in more repressive countries, individuals have lower overall levels of efficacy. This is in line with sociological approaches positing that repression can decrease individuals' efficacy, by signaling the determination and power of the authorities to quell protest (e.g., Muller, 1985). At the same time, it has been suggested that repression, when examined at the level of state sanctions against particular social movements, may bolster efficacy, by indicating the weakening of the state (e.g., Chenoweth, 2015), or the belief that international attention may follow it (Ayanian & Tausch, 2016). Given our focus on country-level repression, however, we hypothesized that higher country-level repression would predict lower levels of efficacy (*H3b)*. The underlying logic is that under more long-standing repressive conditions, where political opportunities are generally more closed, political power is concentrated among a handful of people. Individuals are therefore expected to perceive themselves as having less control over the outcomes of their lives (Fendrich, 1993). This explanation has been used to account for low rates of efficacy (i.e., higher rates of fatalism) in specific national contexts, including China (Thompson et al., 1990) and the former Soviet Union republics for instance (Andrain & Smith, 2006).

Organizational embeddedness. Regarding *organizational embeddedness*, recall that repressive contexts are characterized by closed opportunity structures (Kitshelt, 1996; McAdam, 1982), which could make it more difficult for people to engage in collective or civic life, and therefore to belong to organizations. At the same time, membership in certain (status-quo enhancing) collectives could be encouraged by repressive states, so that the relationship between repression and organizational embeddedness could actually be positive. We therefore formulated competing hypotheses, to explore whether repression increases (*H3c*) or decreases (*H3c')* organizational embeddedness.

Informational embeddedness. Finally, regarding *informational embeddedness*, while we did not have a strong a priori hypothesis, we believed it is plausible that repression could play a role in shaping the informational environments that individuals can, and choose to opt into. Indeed, given that censorship is a strong corollary of repression, and is sometimes conceptualized as one of its dimensions (see Pop-Eleches & Way, 2021), one could predict a complex relationship between repression and informational embeddedness. It could be, for instance, that individuals in more repressive contexts differentially rely on specific types of media, depending on the extent to which they are controlled by repressive state authorities. In other words, if repressive regimes have a particularly strong censoring grip on particular informational channels, individuals living under these regimes might seek out alternative forms of media. We would thereby witness differential levels and types of informational embeddedness in such contexts, compared to less repressive environments. We therefore sought to explore the relationship between repression and informational embeddedness without specific a priori hypotheses (*H3d)*.

Impact of repression on the relationship between protest and its micro-level predictors

Following our investigation of whether and how country-level repression may shape the micro-level predictors of political protest, we aimed to explore whether and how it may shape the relationships between protest and its individual-level predictors. We argue that this endeavor is integral to answering our broad question about the effects of repression on protest.

Specifically, drawing on interactionist models of behavior (e.g., Marshall & Brown, 2006; Schmitt et al., 2013), we reasoned that repression; a contextual factor, may change the functions of micro-level variables in terms of shaping protest. By this logic, the same micro-level predictors may become more relevant (i.e., play a larger role) or less relevant (i.e., play a smaller role) in more repressive countries. This would speak to the notion that specific

processes may be necessary to overcome the contextual presses and obstacles to protest that are imposed by repression. The idea that micro-level predictors of protest may well operate differently in more repressive contexts is echoed in a range of findings across different literatures (see McAdam, 1986).

    Political dissatisfaction. While social psychological accounts of protest in repressive contexts have not directly examined *political dissatisfaction*, they often underscore anger at the state; arguably the emotional proxy of dissatisfaction, as an important motivator (e.g., Ayanian & Tausch, 2016; Ayanian et al., 2021; Pearlman, 2013). Still, other work has shown that the mobilizing effect of anger may dissipate when individuals experience fear in regards to potential repression associated with protest (e.g., Adra et al., 2020a). And more closely related to our predictor of interest, Corcoran et al., (2015) have argued that perceptions of structural disadvantage, a reasonably related concept to political dissatisfaction, may have less influence on protest when the latter is associated with higher costs. The broad idea is that, when protest is more likely to be associated with costs (e.g., under more repressive conditions), stronger motivation is needed – all else equal – to outweigh these potential costs, and fuel action (see Klandermans 1984). When applied to political dissatisfaction, this logic translates into the prediction that when compared to less repressive contexts, in more repressive countries, a larger increase in dissatisfaction would be necessary to motivate the same level of protest (i.e., less predictive power of dissatisfaction). In line with this reasoning, we predicted that political dissatisfaction would play a smaller role in more repressive countries (*H4a)*.

    Efficacy. Regarding the role of *efficacy* under repressive conditions, one can extend the same logic described for political dissatisfaction above (see Corcoran et al., 2015). Specifically, we can reason that compared to the case in less repressive contexts, in more repressive countries higher levels of efficacy would be needed, to outweigh the potential costs, and motivate the same level of protest. We could therefore predict that efficacy would

play a smaller role in more repressive countries. Supporting this proposition, a meta-analysis

of studies on repressed protesters from a multi-site project has recently shown that efficacy

was a non-significant predictor in repressive contexts (Ayanian et al., 2021). And in a similar

vein, some sociological investigations have suggested that efficacy may be less relevant in

shaping high-risk (compared to lower risk) protest (Corcoran et al., 2015). That said, some

social psychological studies conducted in repressive contexts have actually demonstrated that

efficacy emerges as a relevant predictor of protest (e.g., Ayanian & Tausch, 2016), and a

cross-national examination of its impact has suggested it may even play a larger role in more

repressive countries (Corcoran et al., 2011). In non-political contexts, efficacy has indeed

been argued to reduce estimates of risk and increase risk-taking behavior (e.g., Krueger &

Dickson, 1994). This may give efficacy a particularly important role in mobilizing protest in

more repressive contexts. Given these opposing conceptual propositions and their respective

empirical support, we explored whether efficacy would play a smaller (*H4b*) or a larger

(*H4b'*) role in predicting protest in more repressive countries.

　　　Organizational embeddedness. When it comes to *organizational embeddedness*, as

previously mentioned, research has shown that embeddedness in different groups can be a

mobilizing factor (e.g., Klandermans et al., 2008), and it has long been suggested that this is

due to the fact that by getting involved in voluntary associations, individuals learn the way in

which political institutions function (Almond & Verba, 1965). This could give embeddedness

a particularly important role to predict protest in more repressive contexts, where the

opportunities to engage in civic life and gather information about politics are more limited.

Alternatively, it has been shown that the effect of involvement in collectives on the

participation in politics is conditional on the amount of political discussion that occurs in

these networks and the information that individuals are able to gather about politics within

them (McClurg, 2003). Therefore, we could expect a weaker relationship between

embeddedness and protest in more repressive contexts. This is because collectives in

repressive countries could potentially be less characterized by this politicizing power. We therefore explored whether organizational embeddedness would play a smaller (*H4c)* or a larger (*H4c'*) role in predicting protest in more repressive countries.

Informational embeddedness. Finally, when it comes to *informational embeddedness*, while we believed it might motivate protest differently in more versus less repressive contexts, both directions (i.e., larger and smaller role) seemed plausible. The logic is similar to that on organizational embeddedness; on the one hand, closed opportunity structures that hamper the flourishing of collective spaces for mobilization could give informational channels a particularly important role in shaping protest, and on the other hand, the content of such informational channels could be inherently less protest-provoking in more repressive countries. As previously mentioned, this potentially highlights the importance of teasing apart the forms of media that are more (e.g., mainstream) or less (e.g.., alternative) influenced by repression. We therefore explored whether embeddedness in different forms of media would play a smaller (*H4d)* or larger (*H4d'*) role in predicting protest in more repressive countries.

A summary of our thirteen hypotheses can be found in Table 5.

Table 5. *Summary of hypotheses*

Hypothesis	Relevant variables	Expected relationship
H1a	Political dissatisfaction, PP	Positive
H1b	Efficacy, PP	Positive
H1c/c'	Organizational embeddedness, PP	Competing hypotheses
H1d	Informational embeddedness, PP	Positive
H2	Repression, PP	Negative
H3a/a'	Repression, political dissatisfaction	Competing hypotheses
H3b	Repression, efficacy	Negative
H3c/c'	Repression, organizational embeddedness	Competing hypotheses
H3d/d'	Repression, informational embeddedness	Competing hypotheses
H4a	Repression, political dissatisfaction, PP	*(in more repressive countries)* Smaller role
H4b/b'	Repression, efficacy, PP	Smaller/larger role

| *H4c/c'* | Repression, organizational embeddedness, PP | Smaller/larger role |
| *H4d/d'* | Repression, informational embeddedness, PP | Smaller/larger role |

Methods

Sample

To test our hypotheses, we used the 2018 data from the seventh wave of the WVS (Haerpfer, 2020), for 24 countries[8], with a sample of 38,514 respondents. The WVS is a nationally representative survey of randomly selected adults, and it contains wide-ranging biographical information on individual attitudes and values, in addition to individual behavioral measures, including political protest.

Analytical approach

Preparatory analyses

Given the level of control we had over the characteristics of such a large publically available dataset, we took a combined approach of (1) conceptually preregistering a detailed analysis plan prior to any actual analyses, and (2) data-driven decision-making. Study materials can be found on OSF. Any deviations from our preregistered plan are described below.

Structure of the data

The data was structured into two hierarchical levels: Individuals (Level 1) embedded within countries (Level 2). We therefore analyzed our data in a multilevel framework such that at Level 1, there were the main outcome variable (i.e., political protest), its level-1 predictors, and individual-level controls, and at Level 2, there were country-level repression,

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[8] Australia, Bangladesh, Brazil, Chile, China, Colombia, Ecuador, Egypt, Germany, Hong Kong, Indonesia, Iraq, Jordan, Kazakhstan, Republic of Korea, Lebanon, Malaysia, Mexico, Nigeria, Pakistan, Peru, Romania, Thailand, Turkey

and the country-level controls. In our main analyses, every continuous level 1 predictor was country-mean centered, and level 2 predictors were grand-mean centered (Enders & Tofighi, 2007).

Missing values

We started by investigating the amount of missing values in the dataset. As a first step, we removed any pre-registered items that had more than 5% missing values (Tabachnik & Fidell, 2007). The original and remaining items with their levels of missingness, can be found in the supplementary materials. The only scale we had intended on using but had to categorically drop was the use of internet/social media.

With the remaining items, and in line with the results of our psychometric analyses, we created our scales (see below). We then ran a Missing Value Analysis on the full dataset, which included our main variables of interest from the WVS, and three demographic controls; i.e., age, gender, and education, to probe the pattern of missingness in our data. Little MCAR's test was significant, $\chi2(3570) = 11538$, $p < .001$, indicating that the data was not missing completely at random (Tabachnik & Fidell, 2007).

Following recommendations for the use of modern missing data techniques, such as multiple imputation (MI), rather than traditional approaches such as list-wise or pairwise deletion (e.g., Enders, 2010; Newman, 2014), we decided to replace our missing values.

Given that multiple imputation (MI) does not make assumptions about whether the data are missing at random, and that it has been recommended as "the method of choice for databases that are made available for analyses outside the agency that collected the data" (Tabachnik & Fidell, 2007, p. 69), we opted to multiply impute our dataset.

Importantly, one central requirement of MI is that the imputation model needs to be as general as the model of interest (Enders, 2010). In the case of a multilevel dataset, it is imperative that the multiple imputation preserves the nested structure of the data, to ensure that subsequent multilevel analyses are valid (Black et al., 2011; Graham, 2012). We

therefore opted to conduct multilevel MI, and did so by using the package Jomo in R, which

accommodates for multilevel data (see Quartagno et al., 2019 for a full package description).

In a nutshell, Jomo (1) multiply imputes five datasets – taking into account the multilevel

structure of the data, (2) fits the substantive model directly to each of the imputed data sets,

and (3) combines the results for inference using Rubin's rules (Rubin, 1987). To unpack

cross-level interactions, we report simple slopes conducted on one of the five the imputed

datasets.

Psychometrics

We examined the cross-cultural measurement invariance of our ($\geq$ 3 item-) scales,

using multi-group confirmatory factor analyses (CFAs). All countries were entered into each

CFA. Our one item variables did not allow for such invariance testing, given that the models

were not identified (i.e., the number of free parameters is higher than the number of elements

in the variance-covariance matrix). We note that this warrants care in interpreting parameter

estimates related to these variables in our main analyses

Levels of invariance. Because the purpose of our work was to explore relationships

between constructs across countries, and therefore to examine standardized measures of

association, we needed to establish two kinds of invariance (Pedhazur 1982). First, we tested

configural invariance, by specifying the same factor structures for all groups. Second, we

tested for metric (or weak) invariance, where factor loadings were constrained to equality

across groups. Scalar invariance was not required, because we were not interested in absolute

comparisons of scale scores (for a discussion, see Steenkamp & Baumgartner, 1998).

Importantly, we knew that full measurement invariance was unlikely for metric invariance,

given that full metric invariance constitutes "a reasonable ideal [...] a condition to be striven

for, not one expected to be fully realized" (Horn, 1991, p.125). Because full metric invariance

is considered scientifically unrealistic (Horn et al., 1983), and following Steenkamp and

Baumgartner's (1998) recommendations, we sought to establish partial metric invariance for

all our (≥ 3 item-) scales. Byrne et al. (1989) argued that full metric invariance was not necessary for substantive analyses to be meaningful, provided that at least one item (other than the one fixed at unity to define the scale of each latent construct) was metrically invariant. We therefore tested for partial metric invariance of all our scales by restricting the loadings of at least two items to equality across countries in every case.

Extraction. For all CFAs, we relied on Robust Weighted Least Squares (WLSMV) as the extraction method; a robust estimator which does not assume normally distributed variables and provides the best option for modelling categorical or ordered data (Brown, 2006), and which has been shown to be suitable for Likert-type scales (Tarka, 2017).

Model evaluation. To evaluate model fit, we relied on RMSEA, SRMR, and CFI. As the Chi-square statistic has been shown to be highly sensitive to sample size (e.g., Cheung & Rensvold, 2002), we did not use it as an indicator. A model fits the data well if CFI is .95 or higher, RMSEA is .06 or lower, and SRMR is .08 or lower (Hu & Bentler, 1999). Fit is still acceptable until CFI becomes not lower than .90 (Bentler & Bonett, 1980), RMSEA not higher than .10 (Browne & Cudeck, 1992), and SRMR not higher than .10 (Schermelleh-Engel et al., 2003). Following recommendations by Chen (2007), a change of -.010 in CFI, supplemented by a change of .015 in RMSEA or a change of < .030 in SRMR would indicate (partial) metric invariance.

Results. In sum, the results of our CFAs indicated that our political protest scale was partially metrically invariant. Furthermore, the CFA indicated that the informational embeddedness scale was capturing two distinct latent factors; informational embeddedness in regards to old types of media (i.e., newspaper, radio, and television) and informational embeddedness in regards to new types of media (i.e., phone, email, and internet). We averaged across these two sets of items respectively to create two indicators of informational embeddedness, old and new.

Unfortunately, both our organizational and informational embeddedness scales, each failed to meet one of the three cut-offs (CFI) for partial metric invariance, and were instead only configurally invariant across countries. We note that this warrants care in interpreting parameter estimates related to these two variables in our main analyses. The fit indices of all the multi-group CFAs we tested can be found in the supplementary materials, and we report McDonald's omega for each of our scales below, as an estimate of reliability.

Variables

Level 2

Repression. To operationalize repression, we used an index from the Varieties of Democracy (V-Dem) project (Michael et al., 2019). V-Dem is a new approach to conceptualizing and measuring democracy, that provides multidimensional and disaggregated datasets reflecting the complexity of the concept of democracy. Specifically, we used the index called "Political liberties," which answers the question "to what extent are political liberties respected?" (scale: interval, from low to high (0-1)). Political liberties are understood as freedom of association and freedom of expression, and the index is based on indicators that reflect government repression, including, for instance, government censorship effort, freedom of discussion, academic, and cultural expression, bans and barriers to the formation of new political parties, and civil society repression. We reverse scored the index so that higher values describe more repressive countries (i.e., with fewer political liberties; see Figure 4).
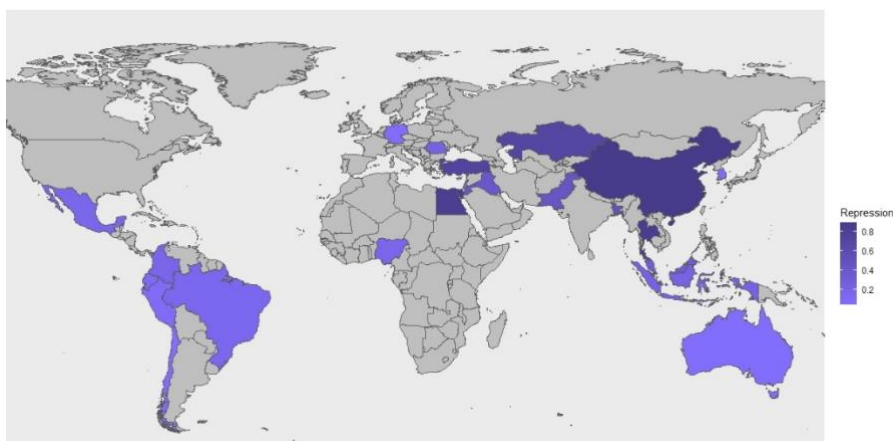

Figure 4: Map of the world, cropped. Colored countries were included in our analyses.

Level 1

Outcome

Political protest (PP). To measure political protest, we created a variable from seven

questions asking the respondent whether they have ever (1) signed a petition, (2) joined a

boycott, (3) attended lawful demonstrations, (4) joined unoffical strikes, (5) donated to a

group or campaign, (6) contacted a government official or (7) encouraged others to take

action about political issues. For each item, we recoded the original response options (1=

Have done, 2 = Might do, 3 = Would never do) to create dichotomous items where 1=Would

never do and 2=Might do or have done. We then averaged across the seven items to create a

PP outcome variable, Ω = .846.

Predictors

Political dissatisfaction. To measure how dissatisfied the participants were with how

the political system is functioning in their countries, we used a 10-point Likert-scale (1 = Not

satisfied at all, 10 = Completely satisfied). We reverse scored the scale so that higher values

indicate more dissatisfaction with the system.

Organizational embeddedness. Following Klandermans et al. (2008) and Shussman

and Soule (2005), we operationalized organizational embeddedness as the number of

organizational ties. We therefore captured the participants' organizational embeddedness

using ten items asking about active or passive membership in different groups, such as

professional, recreational or charitable organizations, as well as political parties and labor

unions. We recoded the original responses (0 = Don't belong, 1 = Inactive member, 2 =

Active member) to create dichotomous items where 0 = No membership and 1 = Inactive or

active membership. We then summed these items to create an organizational embeddedness

score for each participant, Ω = .778.

Efficacy. Following from Acevedo (2008) and Corcoran et. al (2011), we captured

efficacy using an item where individuals were asked how much freedom of choice and control

they perceive themselves to have in their life (from 1 to 10 where 10 = A great deal). Higher

values therefore indicate higher efficacy.

Informational embeddedness. To capture informational embeddedness, we used six

items that asked participants how frequently they relied on different sources; the daily

newspaper, TV news, radio news, mobile phone, e-mail, and the internet, to gather

information about their country and the world. We reverse coded the responses so that higher

values indicate more frequent use (1= Never to 5 = Daily), and we averaged across the first

three (i.e., he daily newspaper, TV news, radio news) to create an informational

embeddedness score for old media, Ω = .566, and the second three (mobile phone, e-mail, and

the internet) to create an informational embeddedness score for new media, Ω = .813.

Controls

Level 2[9]: *Income inequality* was measured by the Gini coefficient of income inequality,

retrieved from the WVS datasets itself.

Level 1: *Biographical Characteristics* included gender (2 = female; 52.36%), age (*M* = 42.28,

SD = 15.66), and education level (1 = Did not complete elementary education; 6.95%, to 8 =

University degree; 20.45%).

<div align="center">Results</div>

Within and between-country bivariate correlations between our variables of interest

are reported in the supplementary materials. Marginal and conditional R^2 for all models,

along with standardized versions, can also be found in the supplementary materials.

Before tackling our research questions, we ran an empty model where we entered

country as a random factor, and political protest (PP) as an outcome (Model 0a). An intraclass

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[9] In the preregistration, we had planned on also controlling for the Human Development
Index (HDI). When entered into Model 1, however, the HDI took away the variance from
repression. Because we were particularly interested in macro repression and its links with
micro-level predators of protest, we excluded the HDI from our subsequent analyses. For the
results and a short discussion of the HDI's role, see the supplementary materials.

correlation (ICC) of .196 indicated that there is substantial variation in PP both at the country

and the individual levels (Thomas & Heck, 2001), meaning that the dataset warranted

multilevel modelling. Then we ran the same model by adding the controls (Model 0b). In line

with previous research (see Corcoran et al., 2011), gender had a significantly negative effect

on PP, meaning that women scored lower than men on PP. Furthermore, age had a significant

negative effect on PP, meaning that older participants scored lower on PP than younger

participants, and education had a positive effect, meaning that more educated participants

scored higher on PP than their less educated counterparts. The Gini coefficient of inequality

did not significantly predict PP. In all of the following models, our three individual level

controls (i.e., gender, age, and education) and our level 2 control (Gini) were consistently

included.

Table 6. *Model 0a, predicting political protest*

Parameters	B	(95% CI)	SE	t	p
Intercept	1.420	(1.356, 1.483)	.032	43.940	**<.001***
ICC = .196					

Table 7. *Model 0b, predicting political protest*

Parameters	B	(95% CI)	SE	t	p
Gender	-.065	(-0.072, -0.058)	.004	-18.33	**<.001***
Age	-.003	(-0.003, -0.002)	.000	-23.38	**<.001***
Education	.033	(0.031, 0.035)	.001	34.84	**<.001***
Gini	.007	(-0.002, 0.0164)	.005	1.53	.125

The following step was to investigate the relationship between repression and PP, for

which we ran a model where PP was entered as outcome, country as a random factor, and

repression as a fixed factor (Model 1). In line with *H2*, repression had a significantly negative

effect on PP, indicating that participants in more repressive contexts scored lower on PP.

Table 8. *Model 1, predicting political protest*

Parameters	B	(95% CI)	SE	t	p
Gender	-.065	(-0.072, -0.058)	.004	-18.34	**<.001***
Age	-.003	(-0.003, -0.002)	.000	-23.38	**<.001***
Education	.033	(0.031, 0.035)	.001	34.84	**<.001***
Gini	.004	(-0.005, 0.013)	.005	0.83	.405
Repression	-.237	(-0.466, -0.007)	.117	-2.017	**.044***

Next, to investigate the individual-level predictors of PP, we ran a model where PP was entered as outcome, country as a random factor, and the five micro-level predictors (i.e., political dissatisfaction, efficacy, organizational embeddedness, and old and new informational embeddedness) as fixed factors (Model 2). Consistent with our predictions, political dissatisfaction (*H1a*) positively predicted PP. Contrary to *H1b*, however, efficacy significantly negatively predicted PP. Furthermore, in line with our predictions, organizational embeddedness (*H1c*), and the two forms of informational embeddedness (*H1d*), all significantly positively predicted PP. Separate models for each of the predictors can also be found in the supplementary materials.

Table 9. *Model 2, predicting political protest*

Parameters	B	(95% CI)	SE	t	p
Gender	-.050	(-0.056, -0.043)	.003	-14.97	**<.001***
Age	-.002	(-0.002, -0.002)	.000	-14.40	**<.001***
Education	.021	(0.019, 0.023)	.001	21.57	**<.001***
Gini	.007	(-0.002, 0.016)	.005	1.58	.114
Political dissatisfaction	.005	(0.004, 0.006)	.001	7.94	**<.001***
Efficacy	-.004	(-0.005, -0.003)	.001	-5.35	**<.001***
Organizational embeddedness	.024	(0.021, 0.026)	.001	20.38	**<.001***
Old informational embeddedness	.029	(0.026, 0.033)	.002	16.85	**<.001***
New informational embeddedness	.042	(0.040, 0.045)	.001	31.28	**<.001***

Next, to examine the notion that repression potentially shapes the predictors of political protest, we ran five separate models where we entered the respective micro-level predictors (i.e., political dissatisfaction, efficacy, organizational embeddedness, old and new informational embeddedness) as outcomes, country as a random factor, and repression as a fixed factor (Models 3a-3d").

As expected, repression significantly negatively predicted efficacy (*H3b*), indicating that participants in more repressive contexts reported lower perceptions of control over their lives. It also significantly negatively predicted informational embeddedness with regards to old types of media (*H3d*), indicating that participants in more repressive contexts obtained less information about their country and the world from newspapers, the television, or the radio. Repression, however, did not have a significant effect on political dissatisfaction (*H3a*), organizational embeddedness (*H3c*), nor informational embeddedness in regards to new types of media (*H3d*).

Table 10. *Model 3a, predicting political dissatisfaction*

Parameters	B	(95% CI)	SE	*t*	*p*
Gender	-.018	(-0.212, -0.163)	.026	-14.91	.488
Age	-.003	(-0.026, -0.025)	.001	-57.63	**.001****
Education	.035	(0.197, 0.210)	.007	58.20	**<.001*****
Gini	.067	(-0.011, 0.057)	.036	1.33	.060
Repression	-1.248	(-1.273, 0.420)	.879	-0.99	.155

Table 11. *Model 3b, predicting efficacy*

		Model 3b			
Parameters	B	(95% CI)	SE	*t*	*p*
Gender	-.082	(-0.045, -0.032)	.023	-3.60	**<.001*****
Age	.003	(-0.003, -0.002)	.001	3.44	**.001****
Education	.079	(0.023, 0.027)	.006	12.20	**<.001*****
Gini	.035	(-0.002, 0.016)	.017	2.01	**.047***
Repression	-.785	(0.115, 0.124)	.393	-2.00	**.046***

Table 12. *Model 3c, predicting organizational embeddedness*

Parameters	B	(95% CI)	SE	t	p
Gender	-.058	(-0.091, -0.026)	.016	-3.60	<.001***
Age	.001	(-0.003, -0.002)	.001	1.38	.169
Education	.045	(0.036, 0.053)	.004	10.36	<.001***
Gini	.023	(-0.017, 0.062)	.020	1.14	.256
Repression	-.363	(-1.323, 0.598)	.490	-0.74	.459

Table 13. *Model 3d', predicting old informational embeddedness*

Parameters	B	(95% CI)	SE	t	p
Gender	-.207	(-0.226, -0.187)	.010	-21.02	<.001***
Age	.010	(0.009, 0.011)	.000	28.90	<.001***
Education	.080	(0.074, 0.085)	.003	28.62	<.001***
Gini	.022	(-0.004, 0.048)	.013	1.67	.096
Repression	-.727	(-1.383, -0.072)	.334	-2.17	.030*

Table 14. *Model 3d", predicting new informational embeddedness*

Parameters	B	(95% CI)	SE	t	p
Gender	-.187	(-0.212, -0.163)	.013	-14.91	<.001***
Age	-.025	(-0.026, -0.025)	.000	-57.63	<.001***
Education	.204	(0.197, 0.210)	.003	58.20	<.001***
Gini	.023	(-0.011, 0.057)	.017	1.33	.184
Repression	-.427	(-1.273, 0.420)	.432	-0.99	.323

Next, to examine the notion that repression potentially moderates the links between political protest and its various predictors, we ran five separate models entering PP as outcome, country as random factor, the respective micro-level predictors (i.e., political dissatisfaction, efficacy, organizational embeddedness, and old and new informational embeddedness), repression, and their respective interactions as fixed factors (Models 4a-4d").

In sum, repression significantly moderated the effects of political dissatisfaction (*H4a*), efficacy (*H4b*), and organizational embeddedness (*H4c*) on PP. The interactions between repression and the two kinds of informational embeddedness were not significant (*H4d*).

Table 15. *Model 4a, predicting political protest*

Parameters	B	(95% CI)	SE	t	p
Gender	-.065	(-0.072, -0.058)	.003	-20.53	**<.001***
Age	-.003	(-0.003, -0.002)	.000	-23.07	**<.001***
Education	.033	(0.031, 0.034)	.001	35.45	**<.001***
Gini	.003	(-0.007, 0.012)	.005	0.58	.560
Political dissatisfaction	.005	(0.003, 0.006)	.001	7.44	**<.001***
Repression	-.249	(-0.479, -0.019)	.117	-2.12	**.034***
Political dissatisfaction x Repression	.018	(0.013, 0.024)	.003	6.75	**<.001***

Table 16. *Model 4b, predicting political protest*

Parameters	B	(95% CI)	SE	t	p
Gender	-.066	(-0.072, -0.059)	.003	-20.63	**<.001***
Age	-.003	(-0.003, -0.002)	.000	-23.07	**<.001***
Education	.033	(0.031, 0.035)	.001	35.87	**<.001***
Gini	.003	(-0.007, 0.012)	.005	0.58	.560
Efficacy	-.003	(-0.005, -0.002)	.001	-3.99	**<.001***
Repression	-.249	(-0.479, -0.019)	.117	-2.12	**.034***
Efficacy x Repression	-.006	(-0.012, -0.001)	.003	-2.16	**.034***

Table 17. *Model 4c, predicting political protest*

Parameters	B	(95% CI)	SE	t	p
Gender	-.060	(-0.066, -0.054)	.003	-19.11	**<.001***
Age	-.003	(-0.003, -0.002)	.000	-23.13	**<.001***
Education	.031	(0.029, 0.032)	.001	33.65	**<.001***
Gini	.003	(-0.007, 0.012)	.005	0.58	.328
Organizational embeddedness	.023	(0.021, 0.024)	.001	32.24	**<.001***
Repression	-.248	(-0.478, -0.019)	.117	-2.12	**.034***
Organizational embeddedness x Repression	.020	(0.015, 0.025)	.003	7.90	**.001**

Table 18. *Model 4d', predicting political protest*

Parameters	B	(95% CI)	SE	t	p
Gender	-.055	(-0.062, -0.049)	.003	-17.51	**<.001***
Age	-.003	(-0.003, -0.002)	.000	-26.96	**<.001***
Education	.029	(0.027, 0.031)	.001	31.48	**<.001***
Gini	.003	(-0.006, 0.012)	.005	0.58	.559
Old informational embeddedness	.048	(0.044, 0.052)	.002	28.48	**<.001***
Repression	-.248	(-0.478, -0.019)	.117	-2.12	**.034***
Old informational embeddedness x Repression	.009	(-0.002, 0.021)	.006	1.57	.117

Table 19. *Model 4d", predicting political protest*

Parameters	B	(95% CI)	SE	t	p
Gender	-.056	(-0.062, -0.049)	.003	-17.83	**<.001***
Age	-.001	(-0.002, -0.001)	.000	-11.56	**<.001***
Education	.022	(0.020, 0.024)	.001	22.90	**<.001***
Gini	.003	(-0.006, 0.012)	.005	0.58	.559
New informational embeddedness	.052	(0.049, 0.054)	.001	37.25	**<.001***
Repression	-.248	(-0.478, -0.019)	.117	-2.12	**.034***
New informational embeddedness x Repression	.007	(-0.002, 0.015)	.004	1.55	.122

To unpack the interactions between repression on one hand, and political dissatisfaction, efficacy, and organizational embeddedness on the other, we ran respective simple slope analyses to compare the effects of these predictors on PP in countries with higher (i.e., 1 SD above the mean) vs. lower (i.e., 1 SD below the mean) levels of repression.

While consistent with our prediction, political dissatisfaction positively predicted PP across the whole sample (see Model 2), contrary to our expectation, the simple slopes showed that political dissatisfaction with the system positively predicted PP in countries with high, *b*

= 0.011, *SE* = .001, *p* <.001, levels of repression, but did not predict it in countries with low

levels, *b* = -0.0002, *SE* = .001, *p* =.710 (Figure 5).

Furthermore, as previously mentioned, contrary to our prediction, efficacy negatively

predicted PP in the overall sample (see Model 2). Upon further inspection of the simple

slopes, efficacy negatively predicted PP in countries with high levels of repression, *b* = -.004,

SE = .001, *p* <.001, but played no role in less repressive contexts, *b* = -.001 *SE* = .001, *p* =

.238 (Figure 6).

And finally, while organizational embeddedness positively predicted PP in both

countries with low and high levels of repression, it played a *larger role* in more repressive, *b*

= 0.034, *SE* = .002, *p* <.001, compared to less repressive contexts, *b* = 0.024, *SE* = .002, *p*

<.001 (Figure 7).
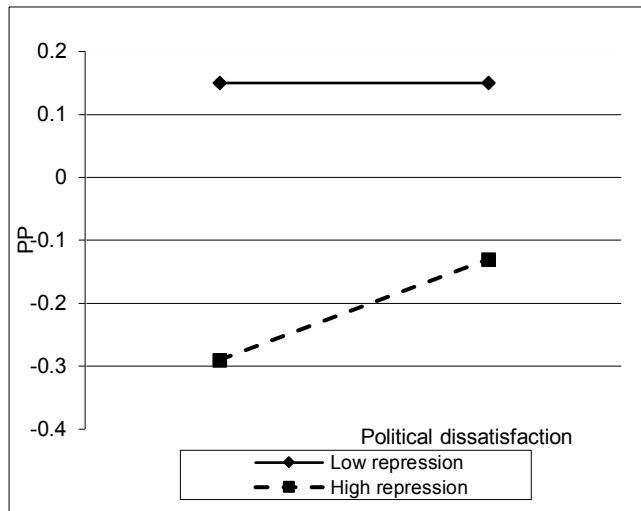
Figure 5: Graph depicting the moderating role of repression on the link between political dissatisfaction and protest.
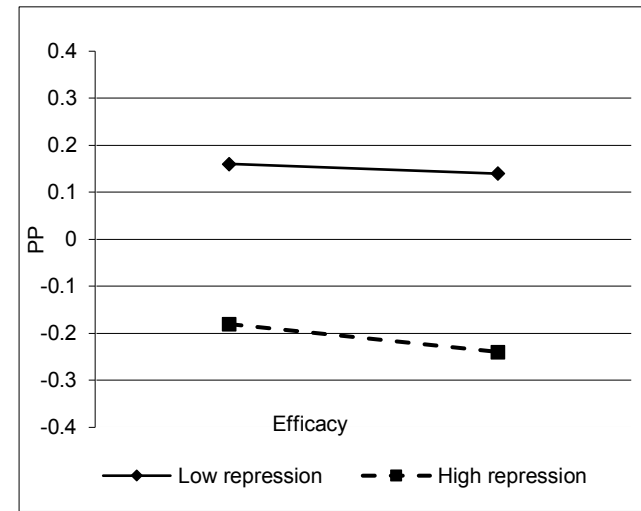

Figure 6: Graph depicting the moderating role of repression on the link between efficacy and protest.
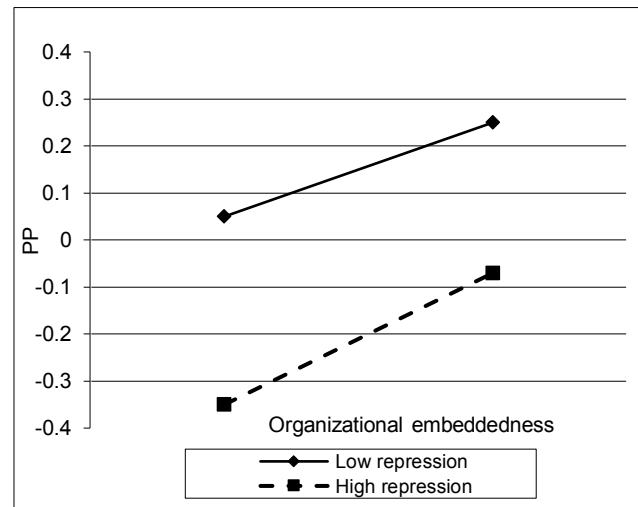

Figure 7: Graph depicting the moderating role of repression on the link between organizational embeddedness and protest.

Discussion

In the present research, we sought to systematically investigate the relationships between country-level political repression, participation in political protest, and its micro-level predictors. To do so, we employed the 2018 data from the World Value Survey (Haerpfer et al., 2020), and used responses from over 38,000 participants from 24 countries across five continents, coupled with the Varieties of Democracy (Michael et al., 2019) index of political liberties.

Micro-level predictors of political protest

First, we investigated the roles of four micro-level predictors of political protest; political dissatisfaction, efficacy, organizational embeddedness, and (old and new) informational embeddedness. At the exception of efficacy, all other variables, in line with our hypotheses, significantly positively predicted protest across the whole sample. Our results therefore suggest that individuals who are more politically dissatisfied and better embedded in organizational and informational networks are more likely to participate in political protest. This is, to the best of our knowledge, the first time that such a wide array of micro-level predictors, derived from various social scientific traditions and theoretical backdrops, is tested simultaneously in a large, culturally diverse sample. They specifically support two distinct, central paths to protest found in the literature; the grievance-based path and the instrumental path. Indeed, when entered as simultaneous predictors, these variables retained their predictive power, showing their unique relationships with protest. Interestingly, however, efficacy – a well-established mobilizing factor in the literature, turned out to be a significant negative predictor of protest in our analysis, and we will return to this finding below.

Impact of repression on protest

Next, and as expected, we found that countries with higher levels of macro repression were characterized by lower levels of political protest. In line with Resource Mobilization Theory (see Gamson, 1975; Oberschall, 1973; Tilly, 1978) this finding highlights the power

of closed opportunity structures in quelling protest (see also, and Political Process Theories; Tarrow, 1998; Tilly, 1978). Indeed, in contrast to work on how experiences of repression in the presence of a social movement seem to have mobilizing potential (e.g., Ayanyan & Tausch, 2016; Ayanyan et al., 2021), our results lend support to the idea that, when understood as a long-term characteristic of a social context, which structurally inhibits freedom of association and expression, repression seems to succeed at dampening individuals' participation in political protest.

How do we then understand the discrepancy between repression sometimes – in line with our current findings – seeming to quell protest, and at other times – in line with previous investigations (e.g. Ayanian et al., 2016; Ayanian et al., 2021) seeming to fuel it? In other words, how can we make sense of the repression paradox (see Kurtz & Smithey, 2018)? The answer to this complex question, we speculate, requires a temporally dynamic investigation of how repression, operationalized at multiple levels, shapes the initiation and trajectory of social movements (see Brockket, 1997). Could it be, for instance, that country-level repression decreases the likelihood of protest initiation, while repressive responses to already existing mobilization, when it does occur, exacerbate participation? And could it be, for example, that country-level repression tightens the sphere of which individuals may instigate protest, while repressive responses to these protests, once they begin, widen the scope of who may become willing to join? We will return to these questions in Chapter 3.

Impact of repression on micro-level predictors of protest

Following our investigation of the relationship between country-level repression and overall protest, as the crux of the current work, we aimed to explore the relationships between repression and the micro-level paths to protest. As a first step, inspired by Opp's (2010) idea of a Structural Cognitive Model, we explored whether country-level repression may impact the micro-level predictors of protest. We found that in our analysis, this was the case for efficacy and informational embeddedness, but only in regards to old types of media.

As hypothesized, country-level repression negatively predicted efficacy, signaling that overall, individuals in more repressive countries felt like they have less control over their lives. This makes a great deal of sense, given that repressive regimes are characterized by closed opportunity structures and power centralization in the hands of a governing slice of society, thereby explaining an overall dampening of efficacy among the broad population (e.g., Corcoran et al., 2011).

Furthermore, we found that country-level repression negatively predicted informational embeddedness in regards to old types of media, indicating that individuals in more repressive countries relied less frequently on the daily newspaper, TV news, and radio news, to gather information about their country and the world. Interestingly, this effect of repression did not replicate for new types of media, including mobile phone, e-mail, and the internet. We can only speculate as to why repression seems to reduce reliance on old types of media for the gathering of information, but one potential explanation could lie in that censorship is a strong corollary of repression (see Pop-Eleches & Way, 2021), and indeed, is one of its dimensions in our current operationalization. It may be the case that because repressive authorities strongly censor the content of old types of media, but have less ability to do so for new ones, individuals in repressive countries find themselves relying less on sources such as the newspaper, the television, and the radio. This presents an important avenue for future research, to uncover how repression may shape individuals' opting into particular informational environments.

At the same time, repression did not predict political dissatisfaction nor organizational embeddedness. We had formulated competing hypotheses for the relationships between repression and these variables, and our null findings could potentially signal both positive and negative impacts of repression. It could well be that repressive conditions increase dissatisfaction with the government through a grievance-based pathway for some individuals, but decrease it through a system justifying pathway for others (Jost et al., 2015). It will be

important for future research to tease apart such possibly opposing influences of repression on political dissatisfaction. Similarly, when it comes to organizational embeddedness, repressive authorities may well stifle collective spaces that are potentially conductive to dissent, but simultaneously encourage belonging to demobilizing collectives. A more fine-grained understanding of how repression shapes the groups that people can and do belong to is therefore necessary.

More generally, our combined findings show that repression can indeed contribute to shaping micro-level predictors of protest, and we believe it crucial to systematically extend our exploration to other motivators of dissent, that were not captured in the WVS. Furthermore, while we limited our current analysis to how repression may influence micro-level predictors of protest, future work could extend our data analytic approach by exploring whether repression shapes protest *via* these processes. Such an analysis – which would amount to testing a (multilevel) mediational model, would statistically test Opp's (2010) Structural Cognitive Model, which posited that macro-level repression affects protest through its shaping of micro-level mechanisms.

Impact of repression on the relationship between protest and its micro-level predictors

Besides testing the effects of repression on the predictors of protest, we explored the idea that the roles of micro-level predictors could be conditional on country-level repression, and this was indeed the case for political dissatisfaction, efficacy, and organizational embeddedness. First, contrary to our expectation, political dissatisfaction predicted protest in countries with high levels of repression, but did not predict it in countries with low levels of repression. Our original reasoning was that, in line with Corcoran et al. (2015), given the higher costs of participation in protest in more repressive contexts, a higher degree of political dissatisfaction would be necessary to motivate protest, thereby making dissatisfaction a weaker predictor in such contexts.

Upon further reflection, however, and closer inspection of the political dissatisfaction item that we employed, this result is not surprising. Indeed, the measure we used captured how much participants were dissatisfied with *how the political system is functioning* in their countries. The finding that this variable motivates political protest in more repressive countries, but not less repressive ones, speaks to the idea that protest in differentially repressive contexts might aim at diverging social change goals (see Sweetman et al., 2013).

Specifically, it has been argued that the majority of the literature on micro-level predictors of protest has focused on one type of protest, the goal of which is the amelioration of a particular group's conditions within a system, that is otherwise seen as legitimate, responsive to individuals' needs, and to which alternative systems are not imagined (e.g., Simon & Klandermans, 2001; Subasic et al., 2008). This is unsurprising given that, as previously mentioned, the literature disproportionately draws on samples from liberal democracies, where protesters are likely to take action not against the system itself, but to target particular aspects of it (Sweetman et al., 2013). Still, this type of protest is not necessarily the one captured in more repressive contexts, where people may take actions to reject the societal arrangement more broadly – a call that was for instance summarized by "the people want to topple the regime;" the chant that spread throughout the Arab Spring starting 2011 (Spindle, 2011). Arguably, dissatisfaction *with the functioning of the political system* better predicts protest with this type of social change goal in more repressive than less repressive contexts. This would indeed present us with a potential account for the finding that political dissatisfaction, as we captured it, was a stronger predictor of protest in more repressive countries. It also highlights the urgency of acknowledging and theorizing the different reasons why people may join protests in more versus less repressive contexts, when trying to paint a comprehensive picture of how collective occurs.

Next, our results also showed that country-level repression moderated the effect of efficacy on protest. Recall that, opposite to our prediction, we found efficacy to negatively

predict protest. This effect was qualified by an interaction with repression such that this was the case in countries with high levels of repression, but there was no relationship in countries with low levels of repression. This result is in opposition to Corcoran et al.'s (2011), who have shown efficacy to be a stronger positive predictor of protest in highly repressive countries.

Still, we believe our finding can be explained by the measure we used to capture efficacy. Specifically, the item we employed asked participants to report the extent to which they felt like *they had control over the outcomes of their lives*. It is plausible, then, that our efficacy measure actually acted as a proxy for status or privilege. In other words, if participants reported perceiving higher levels of control over their lives, that could indicate that they had accrued a higher social standing. Seen from the other side, this would translate into the reasonable finding that the less individuals felt like they had control over their lives (i.e., lower efficacy), and potentially the lower their status or privilege, the more they were motivated to protest. More broadly, this result highlights the importance of distinguishing between different types of efficacy (here, individual-level locus of control) when trying to understand the influence of this instrumental variable on protest.

The third interaction that we found in predicting protest, was between organizational embeddedness and country-level repression. The result, in line with one of our two competing hypotheses, indicated that organizational embeddedness played a larger role in predicting protest in more, compared to less repressive countries. Embeddedness in collectives has indeed been shown to be an important motivator of protest, arguably because networks provide individuals with the resources necessary to join protests (see Klandermans et al., 2008). One such resource is a politicizing potential that emerges from participation in any voluntary association, which teaches one how to engage in civic life, and naturally expands their access to information about politics (Almond & Verba, 1965). The moderation we found, therefore, potentially speaks to a particular importance of this politicizing potential in

more repressive contexts. Given how more repressive countries are generally characterized by closed opportunity structures (Kitshelt, 1996; McAdam, 1982), it makes sense that collective spaces play a cardinal role in mobilization, compared to less repressive contexts, which may offer other avenues for politicization.

More broadly, these findings speak to the potential existence of a micro-macro interaction, whereby the relationships between micro-level factors and protest are conditional on the macro-level. Taken together, our results make an important case for the integration of macro and micro level influences on collective action, and they strongly encourage researchers, moving forward, to combine theoretical approaches from across the social sciences, to make sense of which individual processes, under which broader societal conditions, may motivate protest.

Further limitations

Several additional limitations of the current work are worth mentioning. While we opted to use the World Value Survey to investigate our research questions because of its many significant advantages (e.g., the large, nationally representative samples of participants, the number of countries and their wide variation on geographical and cultural dimensions, and most importantly, on their levels of repression), recourse to such massive, publicly available datasets unavoidably comes with drawbacks.

Psychometrically, some of our measures were based on one item (e.g., efficacy) which did not allow us to test for measurement invariance, and others (e.g., organizational embeddedness), were not strongly invariant, suggesting that participants in different countries may have attached different meanings to these factors (see Van de Schoot et al., 2015). This limits our ability to interpret the findings related to these measures, insofar as we cannot assume the existence of identical latent variables behind them.

Conceptually, the WVS prevented us from testing micro-level predictors that we did not have access to. This applied both to more nuanced versions of the predictors we did

explore, and altogether inexistent ones in the WVS. For instance, as mentioned earlier, it

would be important to examine the roles of more fine-grained measures of efficacy, spanning

the spectra of its potential conceptualizations (beyond the individual/locus of control explored

here, to collective and participative political efficacies for instance). Moreover, there remains

a range of micro-level predictors of protest that are simply absent from the WVS, including

for example, identification with or perceptions of solidarity within particular social

movements (see Van Zomeren et al., 2008), emotional reactions such as anger or hope (e.g.,

Van Zomeren et al., 2012), and understandings of the costs of protest participation, including

risk perceptions or fear (e.g., Adra et al., 2020a; Ayanian & Tausch, 2016). We will return to

some of these predictors in Chapter 3.

Importantly, we were also restricted in our operationalization of political protest itself.

While the WVS did include a reasonable number of protest items, spanning a wide array of

collective actions, we remained largely blind to the nature of these actions. Specifically, we

had no information on the political leaning (e.g., left-right) of these actions, their democratic

(pro or anti) positioning (although see "Probing the context of PP" in the supplementary

materials for exploratory analyses and a short discussion of this), nor the causes they were

championing and the goals they aimed to achieve. The conclusions we can draw from our

current results are therefore concerned with participation in protest as a broad,

decontextualized political behavior. While we believe that these limitations do not devalue

our findings, it is crucial that future research attempts to overcome them.

Conclusion

In the present research, we aimed to systematically explore the relationships between

country-level repression, political protest, and its micro-level predictors. By using a large

cross-cultural sample, we demonstrated the negative relationship between macro-level

repression and protest, and explored four distinct micro-level predictors to it, capturing both a

grievance-based and an instrumental path to collective action. Our findings highlighted

multiple important ways in which country-level repression shaped micro-level predictors of

protest, and moderated their associations with it. We hope that this initial exploration will

encourage a more complex and nuanced research agenda on political protest, one which takes

seriously the idea that "the wisdom, creativity, and outcomes of activists' choices – their

agency – can only be understood and evaluated by looking at the political context and the

rules of the games in which those choices are made – that is, structure" (p. 128, Meyer, 2004).

Open Science and Supplementary Materials

Materials for Chapter 2, including preregistration, can be found on OSF.

Supplementary materials can be found here.

Chapter 3

A case study of political protest participation:

Exploring the role of exposure to police violence in the "Chilean Spring"

In the majority of countries across the globe, people live under regimes that are to some extent repressive (Alizada et al., 2021). This means that most individuals participating in protest in different parts of the world regularly face a range of negative consequences in response (e.g., fines, arrest, injury, death), inflicted upon them by the authorities that govern them, and their affiliated apparatuses (e.g., the police). In the last decade alone, this reality has been illustrated on all corners of the planet, from the 12,000 Egyptian civilian activists tried in military courts in 2011 (Josua & Edel, 2015), to Anti-ELAB protestors in Hong Kong being brutalized by riot police in 2019 (Lee et al., 2019), and Chilean students losing their eyes after being shot by pellet guns during mass protests that same year in Santiago (Somma et al., 2020); to name only a few examples.

The question of how repression affects individuals' willingness to engage in protest has been explored across different social sciences. As we have previously discussed, within this vast and multi-disciplinary literature, repression has been investigated at various levels, and its influence on protest has been found to take multiple shapes and directions; including, as summarized by the phrase *repression paradox*, both a deterrent and a mobilizing effect (Earl 2003, 2011).

In Chapter 2, for instance, we captured repression as a long-standing characteristic of the social context that structurally inhibits freedom of mobilization. Within this framework, using the World Value Survey (Haerpfer et al., 2020) and the political liberties index from the Varieties of Democracy (Michael et al., 2019) project, we showed that as expected, individuals in countries with higher macro repression, reported lower levels of political protest. Beyond this direct relationship, we argued that repression can shape multiple predictors of protest, some of which could potentially account for its deterring, and others for its mobilizing effects. We also proposed that repression may modulate the relationships between protest and its predictors, such that it renders some of them more (i.e., larger role) or less (i.e., smaller role) relevant. Our findings highlighted multiple ways in which country-

level repression did indeed predict (some of) the micro-level variables, and moderate their downstream influences on protest.

In the current chapter, by building on and extending our research from Chapter 2, we sought to explore three parallel research questions regarding the relationships between repression, protest, and its micro-level predictors. Here, however, we focus on one particular manifestation of repression – that is, subjective experiences of individuals with negative state sanctions, operationalized as exposure to police violence during a social movement. Therefore, complementing the focus of Chapter 2, in this work, we captured repression as the personal encounter with repressive practices, emerging from a momentary reaction by state authorities and their affiliates, that aims – in real time – to thwart a specific social movement.

At the broadest level, we aimed to investigate the relationship between individual experience with repression and protest. We first explored whether exposure to police violence in the context of a social movement would increase or decrease protest intentions (*H1*). Furthermore, we aimed to examine, in a similar vein to the previous chapter, whether and how exposure to police violence may shape micro-level predictors of protest, and moderate the relationships between protest and its individual-level predictors. We pursued these research questions among a sample of participants in the "Chilean Spring" social movement of 2019. This wave of protests spread from Santiago to the entirety of Chile, broadly demanding fundamental social and economic reform, and it witnessed heavy state repression (Human Rights Watch, 2019). In this context, we again revisited the grievance-based and instrumental paths, and we captured these with recourse to anger at the Chilean government and the police (i.e., grievance), and political efficacy and movement embeddedness (i.e., instrumental). We furthermore explored an identity-based path, by measuring identification and solidarity with the movement, and we sought to examine the role of fear.

Exposure to police violence and micro-level pathways to protest

We have already reviewed two core micro-level pathways to protest in Chapter 2; a grievance-based and an instrumental path (see Van Zomeren et al., 2008).

Grievance-based path

When it comes to the grievance path, recall that Relative Deprivation Theory (see Walker & Smith, 2002) has put forth the perception of grievances and injustice as crucial catalysts of protest (e.g. Smith & Ortiz, 2002). More recent research has given increasing attention to emotional reactions to (rather than cognitive assessments of) injustice, including anger and outrage, and has shown that they strongly predict protest intentions (e.g., Mummendey et al., 1999). In the present research, we focused on anger at the Chilean government and the police.

Importantly, heightened perceived likelihood of repression has been shown to increase protest intentions through outrage at the state and its affiliates (e.g., police) among movement participants (Ayanian & Tausch, 2016; Ayanian et al., 2021). Indeed, researchers have proposed that 'emboldening emotions' (Pearlman, 2013, p. 388) that arise in response to repression may play a crucial role in encouraging people to protest under repressive conditions. We therefore expected exposure to police violence to positively predict protest intentions via increased anger (*H2*).

Instrumental path

When it comes to the instrumental path to protest, efficacy (e.g., Brunsting & Postmes, 2002) and embeddedness (e.g., Klandermans et al., 2008), have both emerged as important additional precursors of protest. Indeed, research has shown that more efficacious individuals (e.g., Mummendey et al., 1999) and those more embedded in collectives (e.g., Paxton, 2002) are generally more likely to protest in less repressive environments. We therefore explored these two micro-level variables in the context of the Chilean social movement.

The research on the how repression shapes efficacy is, as reviewed in Chapter 2, quite mixed. On the one hand, repression has been argued and shown to decrease efficacy (e.g.,

Corcoran et al., 2011), and it has been suggested that this could result from a signaling that the state is determined to thwart protest and capable of doing so (e.g., Muller, 1985). On the other hand, it has been demonstrated that the perceived likelihood of repression can increase the perceived efficacy of the relevant social movement (Ayanian et al., 2021), by potentially indicating the weakening of the state (Chenoweth, 2015). Here, we zoomed in on political efficacy, by capturing the perceived effectiveness of protest by the social movement in achieving different political goals, and we explored how exposure to police violence may predict protest positively (*H3*) or negatively through the it (*H3'*).

When it comes to embeddedness, recall the idea discussed in Chapter 2, that repression may pose barriers to individuals' involvement in collectives. This may also apply in regards to embeddedness in the social movement itself, or the extent to which participants' family and friends participate in the protests. Because higher levels of individual-level exposure to police brutality may signal more pervasive repression of the social movement as a whole, it may be associated with lower levels of involvement by the social networks of those still participating in protest. It is therefore plausible that experience of police violence may negatively influence protest through embeddedness in the movement.

Identity-based path

In addition to the grievance-based and instrumental paths to protest, we sought to expand our analysis by including an identity-based path. Rooted in Social Identity Theory (Tajfel & Turner, 1979), a third approach to protest has highlighted identification with groups as a main driver of protest (e.g., Drury & Reicher, 2000, see Van Zomeren et al., 2008). Across a wide array of collectives, such as women (Kelly & Breinlinger, 1995), Iraqis (Fischer, Harb, Al-Sarraf & Nashabe, 2008), farmers (Klandermans, 2002), or social movements themselves (e.g., Simon et al., 1998), research has consistently demonstrated that more highly identified individuals are more likely to participate in protest with and on behalf

of these collectives. Here, we explored the role of identification with the Chilean social movement.

Alongside our broad measure of identification with the movement, we also sought to zoom in on the role of solidarity with other movement participants. Intragroup research has indeed suggested that solidarity with group members is an important facet of identification (see Leach et al., 2008), and solidarity has been argued to be a crucial galvanizer of social movements (e.g., Tsung-gan, 2017).

Importantly, repression may increase protest via bolstering identification with the social movement (Ayanian et al., 2021). It has been suggested that this occurs because repression can heighten protesters' perception that they share a common fate, which increases their investment in the group (e.g., Drury & Reicher, 2009). We therefore expected exposure to police violence to positively predict protest intentions via identification (*H4*) and solidarity (*H5*).

The role of fear

Besides the three protest-mobilizing pathways reviewed above, we sought to explore the potentially demobilizing role of fear, in further explaining the relationship between repression and protest. Although research examining the role of fear in shaping collective action is very scarce, the few studies that have done so have provided evidence for its demobilizing potential (e.g., Miller et al., 2009; Adra et al., 2020; Young, 2019). A recent analysis, for example, showed that the more protestors perceived themselves as likely to face repressive state actions, the more they were afraid, and subsequently had lower protest intentions (Ayanian et al., 2021). In the current work, we reasoned that experiencing repression in the form of police violence can similarly spark fear among movement participants, and that fear is subsequently likely to hamper protest intentions (*H6*).

In sum, we aimed to examine how variables from across three core motivating pathways to protest; i.e., grievance-based, instrumental, and identity-based, as well as the potentially demobilizing role of fear, would be influenced by exposure to police violence and predict future intentions to protest.

The moderating role of exposure to police violence

While previous research suggests that exposure to police violence could potentially play an important role in shaping micro-level predictors of protest, we also aimed to explore the idea that it may moderate their associations with collective action. This proposal, reminiscent of our argumentation in Chapter 2, draws on interactionist models of behavior (e.g., Marshall & Brown, 2006; Schmitt et al., 2013), and argues that contextual factors – here, exposure to police violence – may change the functions of individual-level variables and their impact. By this logic, we could expect our micro-level predictors of protest to become more relevant (i.e., play a larger role) or less relevant (i.e., play a smaller role) in shaping willingness to engage in future actions, depending on the extent to which movement participants had been exposed to police violence. While these analyses were largely exploratory, we provide some intuitions we had regarding the different micro-level predictors' roles below.

Anger. Given that exposure to police brutality can be thought of as a cost associated with protest, it may be that more anger is necessary among those who have incurred more costs (i.e., higher exposure), to fuel the same amount of action – all else equal, compared to those who have incurred less (i.e., lower exposure; see Corcoran et al., 2015). This would amount to anger playing a smaller role among those who experienced more police violence. At the same time, anger has been shown to be a primordial ingredient in emboldening political action under repressive circumstances (Pearlman, 2013), which may mean it plays a larger role in predicting protest intentions among those who have experienced more repression first-hand, i.e., more police violence.

Political efficacy. We can extend the logic leading us to expect a smaller role for anger among those who experienced more police violence, to political efficacy. Specifically, among those who experienced more police brutality, a higher perceived effectiveness of the movements' actions might be necessary, to motivate the same level of willingness to engage compared to those who experienced less. It is therefore possible that political efficacy would play a smaller role in predicting future protest intentions, among individuals who have been exposed to more police violence.

Movement embeddedness. Regarding embeddedness, it is plausible that having one's friends and family be strongly immersed in the social movement (i.e., movement embeddedness) may play a particularly important role (i.e., larger role) in motivating protest among those who have experienced police brutality for their participation. Specifically, friends and family may provide those who have experienced higher levels of police violence with the needed social support to cope with and overcome the individual repercussions of repression. Those who experienced less police violence may, in comparison, be less strongly motivated by such considerations. It is therefore possible that movement embeddedness would play a larger role in predicting future protest intentions, among individuals who have been exposed to more police violence.

Identification and solidarity. The roles of identification and solidarity under high versus low exposure to police violence may be akin to that of anger. On the one hand, given the higher costs incurred by those who experienced more police violence, it may be that stronger perceptions of psychological ties with the movement are necessary to motivate the same level of willingness to engage in future action (i.e., identification and solidarity would play a smaller role). On the other hand, such psychological ties have been credited with "lifting" individual concerns to group-level considerations (see Social Identity Theory; Tajfel & Turner, 1979). This may make them especially potent (i.e., play a larger role) in encouraging protest intentions of those who have personally suffered police violence, for the

sake of the broader social movement. It is therefore possible that identification and solidarity would play a smaller role or larger role in predicting future protest intentions, among individuals who have been exposed to more police violence.

Fear. Finally, fear of the consequences of further protesting, experienced by those who had witnessed more versus less police violence might carry different nuances. While the fear of those who had been exposed to higher levels of brutality may be more rooted in actual memories of negative consequences, the fear of those who witnessed less violence is likely more distal from lived experience. It could therefore be that fear plays a larger (deterring) role among those exposed to more police violence, because it captures a more deeply-seated and experience-driven worry.

Summary of hypotheses

To explore our predictions in this research amounts to testing one mediational model, and several moderations. Specifically, first, we explored whether exposure to police violence would directly decrease or increase future willingness to engage in protest (*H1*), and we expected it to indirectly increase it via anger (*H2*), to either increase of decrease it via efficacy (*H3/H3'*), and to increase it via movement identification (*H4*), and solidarity (*H5*). We also expected it to decrease future willingness to engage in protest via fear (*H6*). Note that, because we focused on embeddedness in the social movement by measuring the extent to which participants' family and friends had been participating in the protests, we could not explore the way that repression predicts protest via embeddedness. Specifically, since we captured individuals' embeddedness in the social movement by asking about their networks' *past* participation in the protests, it made little sense to predict this variable using exposure to police violence.

In addition to these mediational hypotheses we also aimed to explore whether exposure to police violence would interact with anger, efficacy, embeddedness, movement identification, solidarity, and fear, in predicting future willingness to protest – i.e., whether

these micro-level predictors would play a smaller or larger role among those exposed to more police violence.

Methods

Chilean context

We investigated our research questions in the context of the 2019 "Chilean Spring", which began as a series of student-led actions in protest of a metro fare increase in Santiago, and transformed into a large-scale movement for social and economic reform. The Chilean government responded to the movement with well-documented repression and an excessive use of police force, including shooting with pellets, utilizing teargas, and organizing raids (Somma et al., 2020), which targeted both protestors and bystanders (Human Rights Watch, 2019).

Participants and procedures

This research was part of a larger project for which we recruited participants to fill out an online survey via two different channels. First, we collected a student sample from a Chilean private university, and second, we recruited a community sample using a snowball procedure, starting with ten seeds based on a collaborator's personal contacts. The two samples were comparable in terms of education and social class, and were therefore combined.

The initial resulting sample consisted of 769 Chilean citizens. Because we were interested in zooming in on the role of exposure to police violence in our analyses, we included only participants who reported having previously participated in the Chilean social movement. Indeed, among participants who had participated in the movement prior to taking the survey, over 80% had experienced some extent of police violence, compared to less than 10% among non-participants. Our final sample consisted of 516 Chilean citizens (65% male, 32% female; M_{age} = 27, range = 17-73), the majority of whom (> 75%) had pursued or completed higher education. The self-ascribed social class mean was M = 5.21 (SD= 1.71; 1 =

lowest class, 10 = highest class), and the sample was left-leaning $M = 3.55$ ($SD= 1.92$; 1 =

fully on the left, 10 = fully on the right).

We adopted a committee approach to translating the survey from English into Spanish.

Among four bilingual committee members, one translated the survey, and three reviewed the

translations and resolved any differences among them.

Measures

Our full list of measures can be accessed via <u>OSF</u>. As previously mentioned, this

research was part of a larger project, which has resulted in a manuscript currently under

review (Li et al., under review). That paper, in contrast to the present work, focused on radical

resistance and its antecedents.

Outcome

PP tendencies. We asked participants to indicate their willingness to engage in two clusters of

political protest (PP) actions in support of the movement (0 = not willing at all; 6 = very

willing). Those were (1) attending peaceful demonstrations, protests, or rallies, (2)

participating in everyday resistance (e.g., being active on social media). We averaged across

the two items to create a PP tendencies score (*Spearman-Brown* = .86).

Predictors

Exposure to police violence. To capture exposure to police violence, we asked

participants to indicate whether they had experienced or witnessed a number of different

repressive police actions that were common during the Chilean Spring. They reported (yes or

no) whether they had (1) directly experienced police violence, (2) witnessed police violence

in person, (3) fled from the police to avoid being attacked, (4) suffered the loss of an eye, or

(5) witnessed someone else suffer the loss of an eye. We summed these items to create an

exposure of police violence scale (0=no exposure to 5= exposure to all five).

Anger. We asked participants to indicate to what extent they felt anger, outrage,

hatred, and contempt, when thinking about the Chilean government and the police (0 = not at all; 6 = very much). We averaged across these four items to create an anger variable (α = .87).

Political efficacy. We asked participants to indicate the extent to which they believed peaceful and non-violent forms of protest (i.e., our political protest of interest) are effective in achieving six political goals (e.g., achieve social equality, showing resistance to the Chilean government, increasing support for the movement; 0 = not at all; 6 = very much). We averaged across the six items to create a broad movement efficacy variable (α = .87).

Embeddedness in the social movement. To capture embeddedness, we asked participants to indicate the extent to which their friends and family had participated in the Chilean social movement (0 = not at all; 6 = very much). We averaged across the two items to create an embeddedness score (*Spearman-Brown* = .70).

Movement identification. To capture movement identification, we asked participants to indicate the extent to which they identified with the Chilean social movement (0 = not at all; 6 = very much).

Solidarity. To capture solidarity, we asked participants to indicate the extent to which they had a feeling of "brotherhood/sisterhood" with the people in the Chilean social movement, and they perceived themselves and the people in the Chilean social movement to be "in this together." (0 = strongly disagree; 6 = strongly agree). We averaged across the two items to create a solidarity score (*Spearman-Brown* = .97).

Fear. Adapted from Adra et al., (2020), we asked participants to indicate the extent to which they were afraid of participating in the Chilean social movements, and of the consequences of participation (0 = strongly disagree; 6 = strongly agree). We averaged across the two items to create a fear score (*Spearman-Brown* = .78).

Control

Past participation. To control for the frequency of past participation, we asked participants to indicate how many demonstrations, as part of the Chilean social movement, they had attended. By the time we launched the survey, there had been eleven major ones, (0, 1-3, 4-6, 7-10, 11).

<div align="center">

Results

</div>

Means, standard deviations, and bivariate correlations – controlling for past participation, between our variables are reported in Table 20.

Table 20. *Means, standard deviations, and bivariate correlations – controlling for past participation, between variables of interest*

	Mean (SD)	Anger	Efficacy	Embed	Mov ID	Solidarity	Fear	PP
Exposure to police violence	2.31 (1.14)	.35***	.09*	.23***	.26**	.30***	-.05	.31**
Anger	5.34 (1.32)	1	.06	.18***	.40***	.43***	.12*	.49**
Efficacy	4.64 (1.50)		1	.05	.13*	.14*	.05	.18*
Embeddedness	4.96 (1.35)			1	.40***	.41***	.01	.30**
Movement identification	6.32 (1.05)				1	.69***	.12*	.51*
Solidarity	6.00 (1.27)					1	.07	.54**
Fear	3.36 (1.82)						1	.02
PP tendencies	5.91 (1.55)							1

Note. *p < .05; ***p < .001.

To test our first set of hypotheses, we ran a mediation model using PROCESS (Hayes, 2018, Model 4) with 5000 bootstrap samples and 95% confidence intervals. We entered exposure to police violence as the IV, PP tendencies as the outcome, anger, efficacy, movement identification, solidarity, and fear, as parallel mediators, and past participation as a covariate.
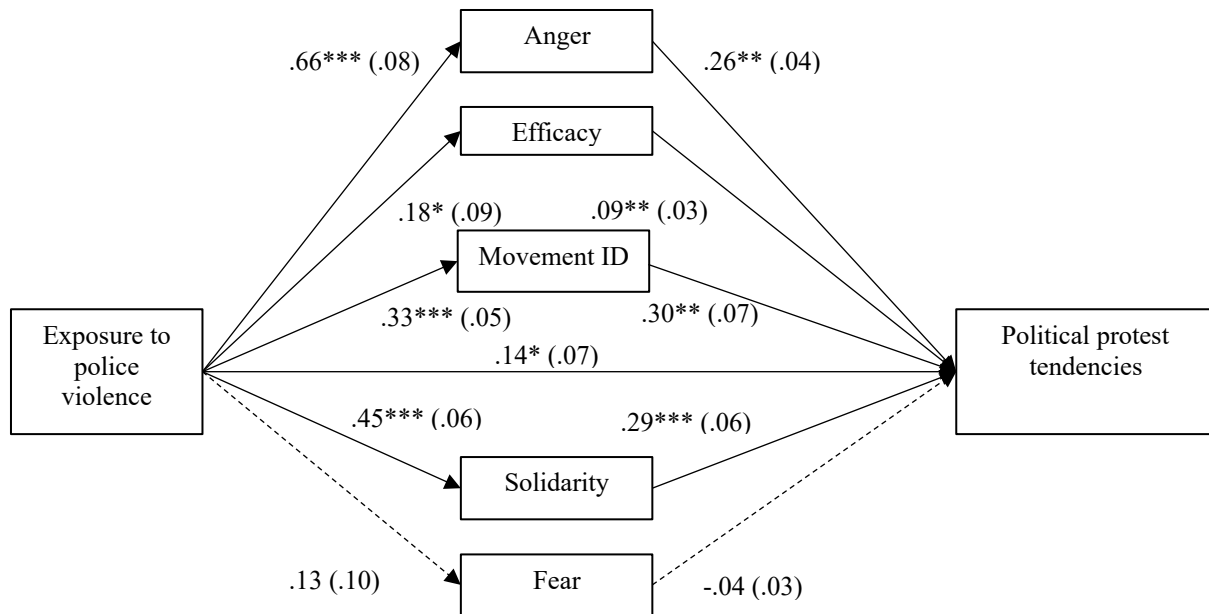
Figure 8. Direct and indirect effects of exposure to police violence on willingness to engage in PP
Note. *p < .05; **p < .01, ***p < .001
Note. Controlling for past participation (b = .17, SE = .04, p < 001)

Results showed that exposure to police violence significantly positively predicted anger, efficacy, identification with the movement, and perceptions of solidarity, and that all four of these in turn significantly positively predicted PP tendencies. Importantly, the indirect effects of exposure to police violence via all four mediators were significant (see Table 21). Interestingly, exposure to police violence did not predict fear, and neither did fear predict PP tendencies.

Table 21. *Indirect Effects of Exposure to Police Violence through anger, efficacy, movement identification, solidarity, and fear*

Indirect effect	Coefficient, CI95(LCI, UCI)
PV → Anger → PP	.18* (.103, .265)
PV → Efficacy → PP	.02* (.0001, .040)
PV → Movement ID → PP	.10* (.040, .168)
PV → Solidarity → PP	.13* (.065, .207)
PV → Fear → PP	-.01 (-.019, .004)

Note. *Significant effects at 95% CI.

To test our second set of hypotheses, we ran six moderated regressions using PROCESS (Hayes, 2018, Model 1) with 5000 bootstrap samples and 95% confidence intervals. In each analysis, we entered the respective predictor as IV, PP tendencies as the outcome, exposure to police violence as a continuous moderator, and past participation as a control. The predictor and the moderator were consistently mean centered.

Across all models, past participation positively predicted PP tendencies, bs ≥ .18, SEs ≤ .06, $p < .001$.

Anger. The overall model was significant, $F (4, 511) = 119.16$, $p < .001$, $R^2 = .48$. Anger, $b = 0.35$, $SE = .04$, CI95 [.267 .424], and exposure to police violence, $b = 0.19$ $SE = .07$, CI95 [.048 .333], both positively predicted PP tendencies. There was also a significant interaction between anger and exposure to police violence in predicting PP tendencies, $b = -0.16$, $SE = .03$, CI95 [-.220 -.092]. While anger positively predicted PP tendencies among both those who experienced low and high levels of police violence, it played a *smaller role* among those who experienced *more* police violence, $b = 0.18$, $SE = .06$, $p < .01$, compared to those who experienced *less*, $b = 0.49$, $SE = .04$, $p < .001$.

Political efficacy. The overall model was significant, $F(4, 511) = 72.38$, $p < .001$, R^2 = .36. Efficacy, $b = 0.14$, $SE = .04$, CI95 [.071 .215], and exposure to police violence, $b = 0.53$ $SE = .07$, CI95 [.389 .678], both positively predicted PP tendencies. There was also a significant interaction between efficacy and exposure to police violence in predicting PP tendencies, $b = -0.11$, $SE = .04$, CI95 [-.193 -.026]. While efficacy positively predicted PP tendencies among those who experienced *less* police violence, $b = 0.25$, $SE = .05$, $p < .001$, it did not predict them for those who experienced *more*, $b = 0.03$, $SE = .06$, $p = .645$.

Embeddedness. The overall model was significant, $F(4, 511) = 93.57$, $p < .001$, $R^2 = .42$. Embeddedness, $b = 0.20$, $SE = .05$, CI95 [.111 .290], and exposure to police violence, $b = 0.37$ $SE = .07$, CI95 [.224 .510], both positively predicted PP tendencies. There was also a significant interaction between embeddedness and exposure to police violence in predicting PP tendencies, $b = -0.26$, $SE = .04$, CI95 [-.334 -.177]. While embeddedness positively predicted PP tendencies among those who experienced *less* police violence, $b = 0.44$, $SE = .05$, $p < .001$, it did not predict them for those who experienced *more*, $b = -0.07$, $SE = .07$, $p = .311$.

Identification with the movement. The overall model was significant, $F(4, 511) = 125.48$, $p < .001$, $R^2 = .50$. Movement identification, $b = 0.52$, $SE = .06$, CI95 [.391 .646], and exposure to police violence, $b = 0.30$ $SE = .07$, CI95 [.165 .433], both positively predicted PP tendencies. There was also a significant interaction between movement identification and exposure to police violence in predicting PP tendencies, $b = -0.19$, $SE = .05$, CI95 [-.286 -.098]. While movement identification positively predicted PP tendencies among both those who experienced low and high levels of police violence, it played a *smaller role* among those who experienced *more* police violence, $b = 0.32$, $SE = .10$, $p < .01$, compared to those who experienced *less*, $b = 0.70$, $SE = .06$, $p < .001$.

Solidarity. The overall model was significant, $F(4, 511) = 130.50$, $p < .001$, $R^2 = .51$. Solidarity, $b = 0.50$, $SE = .05$, CI95 [.396 .604], and exposure to police violence, $b = 0.25$ $SE =$

.07, CI95 [.111 .381], both positively predicted PP tendencies. There was also a significant interaction between solidarity and exposure to police violence in predicting PP tendencies, b = -0.14, SE = .04, CI95 [-.214 -.058]. While solidarity positively predicted PP tendencies among both those who experienced low and high levels of police violence, it played a *smaller role* among those who experienced *more* police violence, b = 0.36, SE = .08, p <.001, compared to those who experienced *less*, b = 0.63, SE = .05, p <.001.

Fear. The overall model was significant, $F (4, 511)$ = 64.17, $p < .001$, R^2 = .33. While fear, b = 0.01, SE = .03, CI95 [-.055 .071] did not significantly predict PP tendencies, exposure to police violence, b =0.55 SE = .08, CI95 [.491 .698], positively predicted them. There was no significant interaction between fear and exposure to police violence in predicting PP tendencies, b = 0.001, SE = .03, CI95 [-.066 .069].

Ceiling effect of protest intentions. Our moderation results showed that, across the board, anger, political efficacy, movement embeddedness, movement identification, solidarity, and fear played smaller roles in predicting political protest intentions among participants who had experienced higher levels of police violence. We therefore sought to explore the distributions of protest intentions across the different levels of exposure to police violence. We did so to examine whether the reason why our micro-level predictors of protest systematically had less predictive power among those who experienced more police violence, was attributable to less variability in protest intentions among them. Indeed, a look at the distributions of future willingness to engage in protest, broken down by level of exposure to police violence, showed that at higher levels of police violence, there was a clear homogenization of protest intentions (see Figure 9). Specifically, we witnessed a ceiling effect, whereby, at higher levels of police violence, participants seemed to consistently report very high willingness to protest.
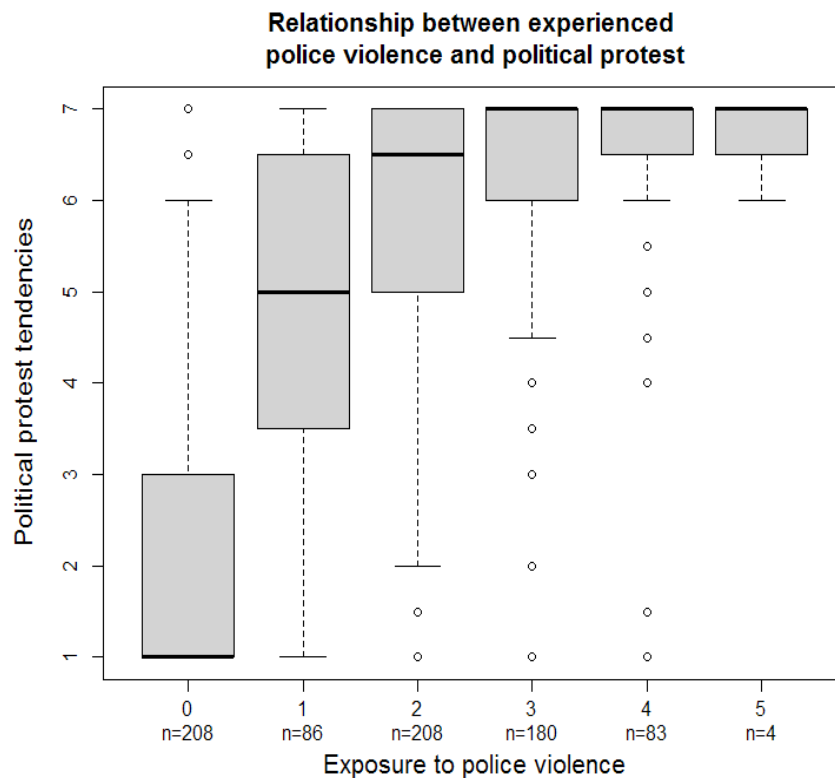
**Relationship between experienced
police violence and political protest**

Figure 9. Distributions of future willingness to engage in protest, broken down by level of exposure to police violence

Discussion

In the present research, we sought to probe whether and how individual experience with repression, operationalized as exposure to police violence, would shape willingness to engage in future protest. Specifically, we set out to examine whether exposure to police violence influences micro-level predictors of protest, and whether it moderates their relationships with willingness to engage in future collective action. We tackled these three research questions by sampling participants in the "Chilean Spring", a movement broadly demanding social and economic equality that erupted in Santiago in 2019, and was met with heavy state repression.

First and foremost, our results showed that individual experience with repression directly motivated protest intentions. While this speaks to and extends previous findings on perceived likelihood of repression positively predicting protest intentions (e.g., Ayanian & Tausch, 2016; Ayanian et al., 2021), it also stands in stark contrast to our findings from

Chapter 2. There, our investigation of the effect of country-level political repression showed that it systematically decreased levels of political protest. These seemingly contradictory results incidentally illustrate what has been referred to as the *repression paradox* (see Kurtz & Smithey, 2018), the gist of which is the following: repression seems to sometimes quell, and other times fuel protest (Earl 2003, 2011). Therefore, as we will return to, our two chapters when examined together could potentially offer some insights into the mechanisms behind the paradox.

Notably, the positive influence of individual experience with repression on future willingness to engage in protest was also mediated by a range of micro-level predictors. Specifically, the more our participants had experienced police brutality, the angrier they were, the more efficacious they believed their actions to be, the more they identified with the movement, and the stronger they perceived the solidarity between its protestors. These variables, in turn, all positively predicted higher willingness to engage in future protest. Interestingly, fear was neither predicted by exposure to police violence, nor did it predict future willingness to engage in protest. These findings are in line with Opp and Roehl's (1990) proposal that negative sanctions, when experienced by social movement participants, set in motion what they term processes of "micro-mobilization" (p. 532). Their broad idea was that individual exposure to repressive reactions by the authorities can function to increase motivation for and commitment to further protest. Our results provide nuance to this logic, by demonstrating that this phenomenon seems to occur through multiple psychological processes, involving core grievance-based, instrumental, and identity-based paths to protest.

At the same time, our moderation analyses add another layer of complexity to the overall picture. Specifically, the results consistently showed that our micro-level variables retained less predictive power among participants who had experienced higher levels of police violence. A follow-up examination of the distribution of protest at different levels of police violence further demonstrated that at higher levels of police violence, participants seemed to

consistently report very high willingness to protest. Because the upper label of our protest intention scale was "very willing" (and not a numerical limit), we believe this constituted a genuine psychological bound of the intention, as opposed to an assessment artifact (see Schmitt et al., 2013). In other words, we propose that at high levels of exposure to police violence, there was a "psychological ceiling effect", driving our participants to cluster around extreme willingness to join future protest.

This is reminiscent of a particular variation of the overarching proposition that context – here, exposure to police violence, is likely to moderate the associations between micro-level predictors and protest. Specifically, Mischel (1977) posited that under strong situations, inter-individual differences would be overridden by situational affordances, and would therefore have less power in influencing behavior (see Cooper & Withey, 2009). In light of our findings, we could potentially reason that exposure to police violence may have constituted a strong situation (see Schmitt et al., 2013), which neutralized the influence of our micro-level predictors, and homogenized protest intentions into uniformly high levels. This speaks to a potentially strong mobilizing influence of individual experience with repression – here, police violence.

The repression paradox: Insights and future directions

Our combined findings from chapters 2 and 3 presented us with an illustration of the repression paradox. While in Chapter 2, repression had an expectedly negative effect on protest levels, it had a positive association with willingness to protest in Chapter 3. This offers us a chance to ponder upon potential interpretations of the paradox – specifically, the differences between the two studies that could explain why the relationship between repression and protest took on opposing directions.

Indeed, our work using the World Value Survey (WVS, Haerpfer, 2020) and Varieties of Democracy index (Michael et al., 2019) on one hand, and our research on participants in the "Chilean Spring" on the other, diverged in multiple crucial respects. Perhaps most

straightforwardly, in Chapter 2, we examined repression as a macro-level, systematic tightening of spaces and shrinking of resources, necessary for the initiation and sustenance of mobilization. We therefore employed an expert-generated national index of political liberties, one that evaluated, for instance, the extent to which each country's governance was characterized by systemic censorship efforts, institutional disincentives limiting freedom of speech in various domains, and systematic obstacles to the creation of new political parties. In Chapter 3, however, we examined repression as the individual exposure to negative sanctions by authorities and their affiliates that aims to thwart mobilization, therefore capturing personal lived experiences.

One potential interpretation of the repression paradox therefore lies in this macro vs. individual distinction. Specifically, there could be a systematic difference between how we should expect repression to predict protest depending on whether we study it at the macro (i.e., deterrent) versus the individual (i.e., mobilizing) levels. This distinction could for instance arise due to the difference between these two levels or aspects of repression, in their ability to engender action-fueling emotions such as anger. It could be the case, for instance, that while macro repression has little power to fuel strong dissatisfaction and its emotional correlates, experiencing repression at the individual level (e.g., being subject to police violence) more easily activates perceptions of deep illegitimacy and outrage at the state.

That said, this distinction between the levels of analysis of repression in chapters 2 and 3 is confounded by other important differences between the two studies. These include divergences in the temporal dynamics of repression, the existence versus absence of a strong social movement, and past participation in or support for the social movement.

First, in Chapter 2, we examined the influence of repression as a long-standing reality, one that, given the documented stability of social systems (e.g., Gamson & Meyer, 1996), individuals are more often than not born into, and generations at a time experience similarly. In Chapter 3, however, we explored the influence of repression as a momentary reaction by

the state, one which operates with the aim of quelling protest in real time. Could it be, then, that temporality accounts for the paradox, i.e., that long-existing repressive practices quell, while newly emergent repressive reactions spur protest? One could reasonably expect, for example, that long-standing repression may create a generalized climate of fear (see Lykes et al., 2007), which potentially demobilizes, while momentary repressive actions have less power to do so.

Additionally, in Chapter 2, we had no information on whether our participants had ever been surrounded by particular social movements, or whether conversely, they had never experienced such an occurrence. In Chapter 3, however, we situated the study in a mass movement, receiving substantial attention both locally and internationally (e.g., Human Rights Watch, 2019). Could it also be that repressive state actions generally hinder protest, but their effect mobilizes participation when individuals are surrounded by a strong social movement? This could speak to the power of politicized collectives to potentially buffer against the demobilizing effects of repression, and instead harness its protest-fueling influences.

Finally, the levels of already-existing support for particular social movements cannot be described as identical in the two chapters. While in Chapter 2, our sample included individuals who had never participated in any form of protest, in Chapter 3, we specifically targeted our analysis at those who reported having participated in the "Chilean Spring," and can therefore be assumed to support it. Could it be that repression generally discourages individuals from protesting, but further mobilizes those who are already in favor of or involved in a particular cause?

We believe these questions offer fertile ground for future research to uncover the workings of the repression paradox. We also do not conceive of them as mutually exclusive potential explanations, but speculate that they might generate additive pieces of the complex puzzle on repression and protest. And we believe that, as mentioned in Chapter 2, such

questions can only be answered by taking a complex approach, which is committedly interdisciplinary, temporally dynamic, and operates at multiple levels of analysis.

Conclusion

In the present chapter, we set out to complement our Chapter 2 examination of how country-level repression may shape protest, its micro-level predictors, and the relationships between them. Specifically, we examined the role of individual experience with repression, operationalized as exposure to police violence, in (de-)mobilizing protest among participants in the Chilean social movement of 2019. We investigated four distinct pathways between repression and protest, first by revisiting grievance-based and instrumental pathways, and then by additionally testing an identity-based pathway, and exploring the role of fear. Overall, our mediational model supported both a direct positive association between exposure to police violence, and indirect positive associations via increased anger, political efficacy, movement embeddedness, movement identification, and solidarity. Our moderation results further suggested the existence of a homogenizing effect of police brutality, whereby at higher levels of exposure to police violence, movement participants invariably reported very high willingness to engage in future protest. These findings – in combination and large contradiction with those of Chapter 2, illustrated the repression paradox, and offered us a chance to reflect on its potential underpinning. We closed by offering some emerging insights and suggesting future research directions.

Open Science

Materials for Chapter 3 can be found on OSF.

General discussion

Individuals around the world so frequently engage in protest or collective action, by taking recourse to nonconventional political actions, such as demonstrations, boycotts, and sit-ins for example, that various academic (e.g., Carnegie Mellon) and non-academic institutions (e.g., The Guardian) have built databases and trackers meant to consistently catalogue such events. A quick look at any of these resources makes clear just how much protest is a ubiquitous phenomenon of modern political life (Norries, 2002). Unsurprisingly then, social scientists have been attempting to understand the drivers of this phenomenon for over a century (Klandermans, 1994), and this endeavor has permeated into multiple disciplines, including sociology, political science, economics, history, and psychology (Van Zomeren et al., 2008). The emergent literature is extensive, fundamentally multi-disciplinary, and consequently packed with divergent approaches and traditions. The present dissertation sought to make multiple contributions to this intellectual sphere, by reporting on a thread of quantitative investigations unanimously centering willingness to engage in or actual participation in protest as the outcome they aim to explain. I intend on using the following general discussion to take stock and look forward, by reiterating the contributions made here, and opening some resulting future avenues for research.

On advantaged protest in support of the disadvantaged

Taking stock…

This project began with the realization that when advantaged group members act in solidarity, they – by definition – do so with the disadvantaged in mind, and often alongside them. I reasoned that this should afford the beliefs that the advantaged hold about how the disadvantaged view them (i.e., their meta-beliefs), a particularly important role in shaping their protest intentions. Indeed, the literature on intergroup meta-beliefs has supported the finding that individuals are deeply influenced by their perceptions of others' beliefs about them, and that these perceptions have the power to substantially contribute to intergroup

relations (Livingstone, Rothers, & Fernández, 2018). Some studies have even demonstrated that meta-beliefs may play a more central role in shaping one's interactions with outgroups, compared to one's beliefs about these outgroups (e.g., Vorauer & Kumhyr, 2001). Building on these findings, and in the context of racial inequality in the U.S., I sought to investigate the potential influence of White Americans' meta-beliefs regarding how Black Americans' view *their role in perpetuating and redressing intergroup inequality,* on their tendencies to engage in collective action in support of Black Americans.

Drawing on both real life examples and the literature on intergroup inequality, I zoomed in on three particular meta-beliefs I believed are highly relevant for advantaged (here, White Americans') protest. The *ally* meta-belief captures White Americans' belief that Black Americans think of them as allies in the fight against racial inequality. The *inactive* meta-belief captures White Americans' belief that Black Americans think of them as passive in that fight. And the *responsible* meta-belief captures White Americans' belief that Black Americans think of them as responsible for the Black community's ongoing struggles. To hypothesize the associations of these meta-beliefs with collective action tendencies, I turned to the literature on positive versus negative meta-beliefs. In line with previous work showing that positive meta-beliefs generally improve intergroup relations (e.g., Vezzali, 2017), I expected the ally meta-belief to increase White Americans' willingness to participate in solidarity-based collective action in support Black Americans. When it comes to the inactive and responsible (both negative) meta-beliefs, the predictions necessitated more complexity.

Specifically, negative meta-beliefs – especially those seen as inaccurate or offensive – have been shown to predict negative outgroup attitudes (e.g., Putra & Wagner, 2017) and even intergroup hostility (e.g., Issmer et al., 2013). Still, a handful of studies have also shown that advantaged group members particularly, may respond to negative meta-beliefs with guilt and a motivation to act in a compensatory manner (e.g., Figueiredo, 2010; Phelps, 2013). I therefore expected the inactive and responsible meta-beliefs to be either positively or

negatively associated with solidarity-based collective action, depending on whether they trigger feelings of group-based guilt and a collective obligation to act, or, conversely, a sense of unfairness. And turning to the literature on social identification (e.g., Branscombe et al., 1999; Doosje et al., 2006), I hypothesized that the extent to which White Americans identify as White, should moderate these divergent implications of the responsible and inactive meta-beliefs. Specifically, I expected that among low identifiers, endorsing inactive and responsible meta-beliefs would be associated with higher collective action tendencies, explained by collective guilt and an obligation to act against racial inequality. Among high White identifiers, conversely, endorsing inactive and responsible meta-beliefs would be associated to lower collective action tendencies, explained by perceived unfairness of these meta-beliefs.

I tested these hypotheses in two studies sampling White Americans, and found consistent support for them. First, the more White Americans endorsed an ally meta-belief, i.e., the more they believed that Black Americans think of them as allies in the fight against racial inequality, the higher was their willingness to engage in protest in support of Black Americans, regardless of their level of identification. Second, the associations between inactive and responsible meta-beliefs and collective action were moderated by White identification. Specifically, among low White identifiers, the more they endorsed an inactive meta-belief (i.e., they believed that Black Americans think of them as inactive in the fight against racial inequality), or a responsible meta-belief (i.e., they believed that Black Americans think of them as responsible for Black Americans' ongoing struggles), the more they experienced collective guilt and an obligation to act. This, in turn, predicted their higher willingness to engage in protest in support of Black Americans. By contrast, among high White identifiers, the more they endorsed an inactive or responsible meta-belief, the more they felt a sense of unfairness, and this in turn predicted their lower willingness to engage in protest in support of Black Americans.

… And looking forward

This first chapter makes contributions to several literatures, including that on intergroup meta-beliefs and social identification. Here, I would like to focus on its contributions to the literature on protest, and how it may inform future research on collective action. Most straightforwardly, this work was the first – to the best of my knowledge – to go beyond perceptions, attitudes, and beliefs of the advantaged, and investigate the meta-level's influence on solidarity-based protest. Its findings therefore open up a novel avenue for future research on advantaged collective action, by introducing an underexplored level of cognition (i.e., meta-beliefs) as a crucial part of the puzzle. Since the publication of these studies, I have indeed had the pleasure of meeting researchers now seeking to explore the roles of meta-beliefs in motivating advantaged solidarity in different contexts, including for example, Turkish protest in support of Kurds, and German protest in support of refugees.

Such work, I believe, should probe the role of meta-beliefs in shaping advantaged protest as potentially deeply contextually bound. For example, it seems plausible that in situations of protracted conflict, where there is extremely little positive interaction between groups, the ally meta-belief may be less relevant. In the same vein, this research ought not, I argue, to be restricted to the three meta-beliefs I zoomed in on, but should rather examine particular advantaged-disadvantaged constellations, and explore any beliefs the advantaged could hold about how the disadvantaged view them, that would reasonably influence solidarity. For instance, it may be relevant to center on advantaged group members' beliefs that the disadvantaged think of them as benefiting from the unequal status quo, as morally untroubled by it, or even as actively protective of it.

I also believe this research may be extended to other non-disadvantaged positionalities. As previously discussed, while the literature has paid increasing attention to protest in solidarity by non-disadvantaged group members, including advantaged (e.g., Van Zomeren et al., 2011) or bystander group members (e.g., Saab et al., 2011), it seems to have somewhat confined its horizon to extending the research on the disadvantaged to these

groups. The work in Chapter 1, I believe, makes an argument for extending beyond the typical processes derived from the literature on disadvantaged protest, and investigating the meta-level's role. For instance, Saab and colleagues (2011), among two bystander groups; British protestors for Palestine, and Hong Kong protestors to commemorate the Tiananmen massacre, found support for the instrumental and emotional (grievance-related) paths to protest. In the case of solidarity-based collective action by the (bystander) British for Palestine, what might be unexplored predictors that are highly relevant? One possibility lies again in the meta-level. Given the colonial role that Britain has played in Palestinian history, it is conceivable that British citizens may be influenced by meta-beliefs related to complicity or interventionism, for example. How would the (meta-)belief that Palestinians view them as complicit in their oppression, or as an interventionist nuisance, shape British solidarity with Palestine? Future work on non-disadvantaged collective action can gain from incorporating such context-specific meta-beliefs.

And finally, I argue that the benefits of examining non-disadvantaged protest in its own right may lead to the investigation of other under-explored predictors, besides intergroup meta-beliefs. In other words, beyond grievance-based, instrumental, and identity-based processes derived from the research on disadvantaged collective action, it may be important to study specific inter-individual difference variables that are particularly likely to shape advantaged or bystander protest. One such variable, for instance, is individuals' readiness to perceive and react to injustice, termed justice sensitivity (Schmitt, 1996). Justice sensitivity has been argued to include four facets, capturing responses when one experiences injustice oneself (victim sensitivity), when one benefits from (beneficiary sensitivity) or actively commits injustice (perpetrator sensitivity), or when one witnesses injustice between others (observer sensitivity). By way of illustration, it is plausible that beneficiary and perpetrator sensitivities might be particularly important in shaping advantaged protest, while observer justice sensibility may be relevant for bystander protest (see Baumert et al., in press). I hope

that future work on non-disadvantaged protest indeed attempts to widen its horizon and

venture into uncharted territory in search of uninvestigated predictors.

On the relationship between macro and micro influences on protest

Taking stock…

While the first chapter of this dissertation involved a micro-level investigation of

advantaged protest, the second chapter set out to integrate macro and micro levels of analysis

in the study of collective action more broadly, without a distinction in positionality. The

literature on what motivates individuals to join protest has indeed generated extensive work at

both the macro-level (i.e., investigating characteristics of the social or political contexts that

may (de-)mobilize protest), mostly studied by political scientists and sociologists, and the

micro-level (i.e., i.e., investigating individual-level factors that may (de-)mobilize protest),

mostly studied by social psychologists. Still, there has been little in the way of expounding on

the links between these two levels of analysis, despite many calls for their integration (e.g.,

Van Zomeren; 2020). In Chapter 2, I sought to do precisely that. Specifically, I aimed to

investigate the potential role that country-level political repression, a macro factor, could play

in shaping participation in political protest and its micro-level predictors.

Repression can broadly be conceptualized as a multifaceted phenomenon aiming to

hinder protest and social change (see Earl, 2011). At the macro-level, repression can be

captured as a tightening of the political opportunity structures (Kitshelt, 1996; McAdam,

1982) at the country-level for instance; thereby zooming in on "state-centered opportunity

structures" (Tarrow, 1996). This amounts to operationalizing macro-level repression as the

degree of repressiveness of the state, or the degree to which it closes political opportunities.

Importantly, while this macro-level factor is arguably crucial in shaping collective

action, most studies on the micro predictors of protest have been conducted in Western liberal

democracies (see Ayanian & Tausch, 2015), where repression is low (Van Zomeren, 2020). I

argued that this has left a large gap in our understanding of how individuals come to join

collective action in countries with different levels of repression. To fill this gap, in Chapter 2,

I analyzed data from the seventh wave of the World Value Survey (WVS, Haerpfer, 2020),

and captured repression as a country-level characteristic, using the political liberties scale

from the Varieties of Democracies (V-Dem, Coppedge et al., 2020) project. First, I asked

what the relationship between country-level repression and overall levels of protest is.

Because I captured repression as the closing of political opportunity structures, I expected it

to have an overall negative influence on protest. Second, I explored two approaches to linking

the macro and micro-levels of analysis.

Specifically, drawing on Opp's (2010) Structural Cognitive Model, I examined

whether country-level repression *shaped* micro-level predictors of protest. Opp (2010) argues

that characteristics of the social or political contexts at the macro-level, e.g., country-level

repression, can systematically influence particular processes at the micro-level, that are

involved in collectively (de-)motivating protest. Next, drawing on interactionist models of

behavior (e.g., Marshall & Brown, 2006; Schmitt et al., 2013), I explored whether country-

level repression, *moderated* the links between protest and its micro-level predictors. The idea

here was that the same micro-level factors may play a larger or a smaller role in shaping

protest, depending on particular contextual presses that make them more or less relevant

under repressive regimes. I investigated these complementary research questions by zooming

in on (micro) grievance-based and instrumental paths to protest, which I operationalized

respectively by utilizing measures of political dissatisfaction on one hand, and efficacy,

organizational embeddedness, and informational embeddedness on the other.

First, as expected, I found that countries with higher levels of repression were

characterized by lower levels of collective action. This finding, which I will return to in the

next section on repression, highlights the power of closed opportunity structures in quelling

protest. Second, I found multiple interesting macro-micro links. On the one hand, country-

level repression predicted efficacy and informational embeddedness (in regards to old types of

media). Specifically, I found that in more repressive countries, individuals reported lower levels of efficacy, and I suggested that this finding may indicate that closed opportunity structures could systematically limit the extent to which individuals perceive themselves to have control over the outcomes of their lives. Furthermore, I found that in more repressive countries, individuals reported lower levels of reliance on the daily newspaper, TV news, and radio news to gather information, compared to less repressive countries. I suggested this finding may point to the possibility that closed opportunity structures could systematically discourage individuals from relying on old types of media, which might be more heavily controlled by state censorship.

On the other hand, country-level repression moderated the links between protest and political dissatisfaction, efficacy, and organizational embeddedness, respectively. To illustrate these interactions, political dissatisfaction only positively predicted protest in more repressive contexts, but was rendered an insignificant predictor in less repressive ones. I argued that this may speak to differences in the social change goals attached to protest in more versus less repressive contexts, because the measure of political dissatisfaction captured how much participants were dissatisfied with how the political system is functioning in their countries. Specifically, I reasoned that this kind of dissatisfaction may be more of a motivator in more repressive contexts, because protestors may take actions to reject the societal arrangement broadly, compared to less repressive contexts, where protestors may take action the goal of which is the amelioration of a particular group's conditions within a system (see Sweetman et al., 2013). Furthermore, organizational embeddedness played a larger positive role in predicting protest in more, compared to less repressive countries. I interpreted this result as an indication that belongingness to collective spaces, and its associated politicizing potential (see Almond & Verba, 1965), may play a particularly cardinal role in mobilization under more repressive conditions, where opportunity structures are generally closed.

… and looking forward

When taken together, the findings of Chapter 2 underscore two important ways in which macro-level variables (i.e., social and political contexts) and micro-level variables (i.e., individual-level variables) can together influence protest. First, macro-level factors (e.g., country-level repression) may have the power to shape micro-level predictors of protest. In my analysis, this was the case for both efficacy; a subjective psychological variable, and informational embeddedness; an objective attribute of individuals. These results speak to the potentiality that macro-level characteristics may play an important role in influencing psychological and objective individual-level variables that typically shape protest. Second, macro-level factors may interact with micro-level factors in influencing protest. I indeed found that country-level repression moderated the links between protest and political dissatisfaction, efficacy, and organizational embeddedness, respectively. These results speak to the idea that the relationships between micro-level factors and protest are conditional on the macro-level. This could occur, for instance, because macro-level factors (e.g., repression) contribute to shaping the particularities of protest itself (e.g., its social change goals) and thereby its predictors, or because they pose certain contextual presses that accord specific factors particularly important (or vice-versa) roles.

I believe these combined findings encourage future research to approach the question of protest with a multilevel lens, by accounting for various levels of analysis, and crucially, the links between them. This could take on multiple forms. For one, it would be fruitful for future research to extend the dual approach that I took to link the macro and micro levels, to other macro and micro-level factors. For instance, given previous work on how culture and education (e.g., Donni et al., 2021) influence protest, it may be a useful next step to examine whether these macro-level factors shape particular individual paths to protest, or moderate their relationships with collective action. Additionally, when it comes to macro-level repression itself, it may be informative to test its links with other micro-level pathways to protest that the Word Value Survey was unfit to capture, such as more context specific

ideological variables, including particular moral norms or convictions (see Ayanian et al., 2020). Furthermore, the dual-level approach I took in Chapter 2 may be extended to incorporate a third level that has been studied in the context of protest; namely the meso-level, defined as one interested in "structural but sub-societal phenomena" (Smselser, 1997). The meso-level, by centering entities such as communities for example, may contribute to bridging the macro and micro levels, and uncovering in more detail the mechanisms behind some of their links (see Staggenborg, 2002).

On repression and protest

Taking stock…

In the third chapter of this dissertation, following the investigation of how country-level repression may shape protest and its micro-level paths, I sought to zoom in on a particular social movement undergoing heavy state repression in real time. I did so to complement the focus of Chapter 2, by examining the role of individual experiences with repression, which I operationalized as exposure to police violence, in shaping protest, its individual-level predictors, and the links between them. I specifically revisited the grievance-based and instrumental paths, operationalizing them as anger at the state and the police on one hand, and the perceived efficacy of the movement and embeddedness in it on the other. I also extended the micro-level processes to include an identity-based path, operationalized as identification with the movement and perceptions of solidarity between its members, and feelings of fear.

I explored how exposure to police violence shaped protest *via* these variables, and how it conditioned their relationships with protest, by sampling participants in the "Chilean Spring"; a massive social movement that spread from Santiago to the rest of Chile in 2019, broadly demanding social and economic reforms (Somma, 2021). Interestingly, in direct contrast to Chapter 2, I found that the more participants had been exposed to police violence; i.e., the higher their individual experience with repression, the higher their willingness to

engage in future protest. The results of the two chapters, i.e., that repression was shown to decrease protest in Chapter 2 and to increase it in Chapter 3, illustrated what has been termed the *repression paradox* (see Kurtz & Smithey, 2018). I will return to that in a moment.

Importantly, the positive influence of individual experience with repression on future willingness to engage in protest was mediated by a range of micro-level motivators. Specifically, higher exposure to police violence predicted higher anger, perceived efficacy of the movement, identification with it, and perceived solidarity between its members. These different predictors were all in turn associated with a higher willingness to engage in future collective action. These findings highlight important ways in which experience with negative state sanctions, in the context of a social movement, may trigger processes of "micro-mobilization" (Opp & Roehl, 1990, p. 532) and further galvanize protest.

Furthermore, the results of the moderation analyses consistently showed that the micro-level variables retained less predictive power among those who had experienced higher levels of police violence. A follow-up examination of the distribution of protest at different levels of police violence then demonstrated the existence of a ceiling effect, whereby at higher levels of police violence, participants seemed to consistently report very high willingness to protest. I interpreted these findings to indicate that exposure to police violence may function as a "strong situation," and thereby override the influence of inter-individual differences that typically (de-)motivate protest (see Cooper & Withey, 2009). This speaks to a potentially strong mobilizing effect of individual experiences with repression.

… and looking forward

From the results of chapters 2 and 3, emerges a seemingly strong contradiction. While in Chapter 2, the investigation of how country-level repression shapes protest demonstrated its quelling effect, in Chapter 3, the examination of the individual experience with repression in a social movement showed its galvanizing potential. This inconsistency has already been described in the literature as the repression paradox, and I believe the two studies reported

here contribute to the literature on repression and protest, our understanding of this paradox, and how future research may further illuminate its underpinnings.

First and most straightforwardly, the findings of both chapters underscore the importance of incorporating repression, regardless of which aspects or levels of it, into our study of protest. Indeed, the combined results speak to the power of repression in shaping protest, whether operationalized as a long-standing national characteristic – in which case it seemed to decrease it – or as individual experience with repressive state sanctions directed at social movement participants – in which case it seemed to increase it. Given that the majority of the world population lives under regimes that are to some extent repressive (Alizada et al., 2021), it will be important for future work on collective action to acknowledge both the level of openness of political opportunity structures that surround the action (i.e., macro-level repression), and the extent to which the action is associated with exposure to state violence (i.e., individual experience with repression).

Furthermore, I propose that a comprehensive understanding of how protest unfolds to the backdrop of repression and navigates its repercussions, will necessitate temporally dynamic and multilevel research. Future work would do well to follow the trajectory of social movements in both less and more repressive contexts, and to dig into how long-standing repression and momentary state reactions may have additive or divergent effects. For instance, macro-level repression may have the power to limit the initiation of collective action, while repression experienced by participants within a particular social movement – when one does come to exist – could instead create a backlash effect, whereby it sets in motion further mobilization (see Brokket, 1993).

On approaching the question of protest

Besides the distinct and complementary contributions that the different chapters of this dissertation made to the literature(s) on protest or collective action, I would like to close this general discussion with some brief reflections and recommendations on how to approach the

phenomenon more broadly. The studies reported here, I believe, highlight multiple important paths to enriching the social scientific knowledge on why individuals come to "take to the streets." For one, this dissertation benefited hugely from its interdisciplinary grounding. Indeed, the research reported here variously fell back on traditions in political science, sociology, history, and (social) psychology, and these approaches brought with them conceptual frameworks that are deeply inviting for integration, and immensely generative when combined.

For two – and perhaps as a consequence – the empirical investigations described here hovered between multiple levels of analysis and various domains, and it profited from their separate and combined insights. I explored predictors of protest at the macro-level; characterizing large-scale contexts such as countries, and the micro-level; capturing differences between people. Within the micro-level itself, I moved between levels of cognition – what people believe and what people believe others believe. And, again within the micro-level, I probed different domains in search of what motivates protest, including subjective psychological processes on one hand, such as cognition (e.g., dissatisfaction), meta-cognition (e.g., intergroup meta-beliefs), and emotions (e.g., anger), and objective individual attributes on the other hand, such as organizational embeddedness. I believe that a fuller picture of what motivates protest can only be sought with such a multilevel and multi-domain approach.

For three, I maintain that the chapters of this dissertation highlight how crucial it is to study protest both as a positionality-bound phenomenon, and as a more decontextualized (in terms of positionality) political action. In other words, I believe that the literature would be strengthened by diving into perspective-specific protest, such as that by advantaged or bystander groups, in its own right, and uncovering mechanisms that are distinct to these positionalities (e.g., meta-beliefs). And simultaneously, I believe there is still much to gain by zooming out of these perspectives and centering on protest more broadly (e.g., Chapter 2).

The combination of these approaches, I posit, can only further our understanding of collective action.

And finally, the chapters of this dissertation varied in terms of the ideological or political leaning of the examined protest. Specifically, chapters 1 and 3 investigated collective action with arguably liberal or progressive causes, i.e., Black Lives Matter and the Chilean Spring, respectively. The second chapter, however, expanded this perspective to actions with likely varying causes in regards to their political leaning, by exploring participation in protest as a broad, decontextualized political behavior. I believe that more such work, i.e., going beyond liberal causes, or even research that actively centers non-liberal social change goals (see Sweetman et al., 2013), can only further our understanding of collective action.

The literature on why we protest, as it currently stands, arguably poses more questions than answers. I hope this dissertation can help – in however small a degree – propel it into asking useful ones, and approaching them with interdisciplinary, multilevel, multi-domain, and multi-perspective lenses.

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