Deterrence or Defiance? How Severity and Selectivity Shape Protest Responses to Repression

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Abstract

State repression's effect on protest behavior is theorized to depend on two key dimensions: its severity (level of harm imposed) and selectivity (whether targeted or indiscriminate). While scholars have developed sophisticated theoretical frameworks around these dimensions, most empirical evidence comes from authoritarian contexts. Moreover, we lack systematic evidence about how specific combinations of severity and selectivity influence protest dynamics. Using data from Chile's 2019 protest cycle, I examine how different tactical combinations shape subsequent mobilization. Through models accounting for spatial dynamics and temporal effects, I find patterns that challenge theoretical expectations. Contrary to predictions, selective high-severity tactics generated short-term mobilization rather than deterrence, while low-severity tactics produced significant protest increases regardless of their selectivity. Survey evidence reveals that these effects operated partly through public attitudes. These findings demonstrate the need to revise theoretical frameworks around severity and selectivity, particularly in democratic contexts.

Keywords: police repression, protests, state coercion, repressive tactics, mobilization dynamics

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1 Introduction

Protests serve as a critical means for people to express their demands and to make themselves heard. In recent years, there has been a significant increase in the number of protests worldwide,[1] particularly in established and emerging democracies. This surge has coincided with growing public discontent over political, economic, and social issues. Although protests are a fundamental political right in democratic societies, demonstrators are often severely repressed. The use of force by law enforcement officials against protesters has increased, even in consolidated democracies.[2] Scholarship on the repression-dissent nexus suggests that repression can have divergent effects: it may either discourage and diminish protest activity or provoke a backlash, potentially increasing mobilization and escalating protesters' tactics toward violence (Rasler, 1996; Sullivan, Loyle, & Davenport, 2012). However, the specific mechanisms determining whether repression deters or increases protests remain subject to ongoing scholarly debate.

Research examining the relationship between state repression and protest behavior has identified two key dimensions that shape repression's effects: its severity and selectivity. Severity refers to the harshness of the measures employed, whereas selectivity indicates whether such measures are targeted at specific individuals or applied indiscriminately. When repression leads to deterrence, it typically operates through high-severity tactics that impose substantial costs on participants (Gamson, 1975; Tilly, 1978) or selective targeting that degrades organizational infrastructure (Sika, 2024). However, these features can sometimes produce opposite outcomes (Pearlman, 2013). High-severity repression may generate moral outrage when perceived as unjust (Hess & Martin, 2006; Honari, 2018). At the same time, indiscriminate application of repressive tactics can foster solidarity and shared grievances (della Porta, 1997; Josua & Edel, 2015), increasing the willingness of people to participate in protests. Despite recognition that repression's effects likely depend on these tactical choices (Earl & Soule, 2010), empirical studies have yet to thoroughly examine how the interaction between severity and selectivity shapes protest responses.

While scholars have developed sophisticated theoretical frameworks for analyzing repression (see Davenport, 2007a), there are two important gaps. First, most research has focused on repression in authoritarian contexts (e.g., Bautista et al., 2023; Curtice and Behlendorf, 2021), leaving us with limited knowledge about how severity and selectivity operate in democratic settings, where institutional constraints and public expectations of governmental and police accountability may alter their effects. Second, although recent studies have examined broader strategic choices in democracies, such as escalation versus restraint (Aytaç, Schiumerini, & Stokes, 2017), we lack systematic evidence about how specific combinations of severity and selectivity influence protest dynamics. This gap is particularly critical because democratic governments often face intense domestic and international pressure to balance maintaining public order with upholding civil rights. This may result in novel forms of repression or more subtle applications of force. This paper addresses these gaps by providing a detailed analysis of how different elements of repressive tactics—what some studies have called "patterns of violence" (Gutiérrez-Sanín & Wood, 2017)—affect subsequent protest mobilization.

To contribute to this literature, I analyze the *Estallido Social*, a protest cycle in Chile that began in October 2019 and lasted until the start of the COVID-19 pandemic. Chile's status as a consolidated democracy and its historically institutionalized police force make it an especially revealing case. The government's use of varied repressive tactics, ranging from low-severity crowd control to highly severe beatings, and from selective arrests to indiscriminate rubber bullet use, provides an ideal setting to examine how severity and selectivity interact to shape protest responses. Leveraging daily protests and repression data, I test which combinations of these characteristics produce deterrence and backlash. By focusing on the day-to-day fluctuations in protest behavior, this approach reveals how immediate and cumulative experiences of repression influence activists' decisions to continue or expand mobilization. The analyses indicate that theoretical predictions about severity and selectivity require significant revision in democratic contexts, where citizens' normative expectations about appropriate police conduct and government accountability may

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fundamentally alter how repressive tactics influence mobilization.

The findings challenge core theoretical expectations about how severity and selectivity shape protest responses. Contrary to predictions that selective high-severity repression deters protests through targeted disruption, tactics like beatings generated short-term mobilization. Similarly unexpected, low-severity tactics produced significant mobilization regardless of their selectivity, with crowd control techniques showing gradually increasing effects over time. These results move beyond theories that singularly emphasize the threshold of costs, as per Gurr (1970) and Lichbach (1987), or the scope of repression. The results suggest that protesters interpret and respond to repressive measures based on perceived legitimacy, shared identities, and the broader political climate, not merely by calculated cost-benefit assessments.

This study refines our understanding of how repressive tactics influence protest behavior in democratic settings. Rather than operating primarily through immediate cost-benefit calculations (Digrazia, 2014; Opp & Roehl, 1990), the results highlight the importance of temporal dynamics and expectations regarding police conduct. The deterrent effect of high-severity tactics like rubber bullets emerged gradually through repeated application, while selective targeting proved less effective at suppressing dissent than theoretical models would predict (Demirel-Pegg & Rasler, 2021; Josua & Edel, 2015). Moreover, when repeatedly employed, even low-severity crowd control tactics eroded public trust in authorities, thereby increasing sympathy for protesters and encouraging further mobilization. Survey evidence suggests these patterns reflect how different tactical combinations shape public attitudes—with even low-severity crowd control techniques significantly influencing perceptions of police legitimacy and protest justification when applied repeatedly. This approach demonstrates how democratic contexts may fundamentally alter the relationship between tactical choices and protest responses, challenging existing theoretical frameworks developed primarily from authoritarian cases.

2   How Repression Affects Protest Behavior

Extensive research has scrutinized the relationship between state repression and protest behavior.[3]   A central question in this literature examines why state repression, while intended to suppress dissent, can sometimes produce the opposite outcome—a phenomenon that is also known as the coercion-protest paradox (Pearlman, 2013). This paradox emerges because repression's effect depends on how it alters both the perceived costs of protest participation and protesters' emotional and strategic responses to state violence. As deMeritt (2016) demonstrates through her analysis of state violence, understanding this relationship requires examining how specific tactical choices shape dissent within particular institutional contexts.

2.1   Repression as a Mobilizer of Protest

Repression can increase protest participation via various mechanisms. Some explanations focus on the responses that repression generates in protesters, who may react with moral outrage or escalate their tactics to violence (Honari, 2018; Setter & Nepstad, 2022). While these participant-centered explanations offer valuable insights, they do not fully explain why specific repressive actions provoke stronger mobilization than others, as they overlook how specific characteristics of repressive tactics influence protesters' perceptions and decisions to mobilize. By examining the characteristics of repressive tactics, it is possible to understand the mechanisms through which state actions directly alter the perceived costs and benefits of protesting. This section focuses on two key characteristics of repression that emerge in the literature as particularly likely to generate this mobilizing effect: its visibility and its scope.

The visibility of repression shapes its potential to generate a response from the citizenry. When repressive actions are openly observable to protesters and bystanders, they can incite further protests by creating a shared awareness of state aggression. Unlike covert forms of repression, which prevent citizens from harboring anger against the regime by keeping the "enemy" invisible (Hager & Krakowski, 2022), visible

repression signals to the public that dissent is being actively suppressed. Such public knowledge can intensify grievances and mobilize support. For example, in the Arab Spring, repression that spread beyond those directly impacted drew large-scale participation even as risks grew (Pearlman, 2013). The impact of visible repression is further amplified when it is documented and disseminated through social media or news coverage, as seen in events like the 2020 protests following George Floyd's killing (Reny & Newman, 2021). In this way, both immediate, in-person visibility and subsequent sharing through the media can widen the protest base, encouraging mobilization among individuals who might not otherwise have participated.

The scope of repression affects its mobilizing potential. When widespread repression affects entire communities rather than specific individuals, it creates a shared sense of grievance and solidarity (della Porta, 1997; Josua & Edel, 2015). Under these conditions, potential protesters may perceive that the risks of protesting are not significantly higher than the risks of non-participation if repression is indiscriminate. This perception can lower the relative costs of protesting and encourage collective action. The Catalan independence movement illustrates this dynamic, where repressive actions that affected broad segments of the population intensified support across previously uninvolved communities (Balcells, Dorsey, & Tellez, 2021). When the scope of repression is broad, tactics aimed at isolating and intimidating specific protesters lose their effectiveness, as potential dissenters see that anyone can become a target (Esberg, 2021). This shared experience of risk under widespread repression can, in turn, deepen solidarity and strengthen collective resistance (Thachil, 2020). Consequently, as repression expands to encompass entire communities, the perceived collective benefits of protest may outweigh the individual risks, shifting the cost-benefit analysis in favor of mobilization.

These characteristics of repression help explain why state efforts to suppress dissent can backfire and generate further mobilization. When repressive actions are both visible to a wide audience and broad in their application, they are particularly likely to alter the cost-benefit calculations of potential protesters in ways that favor participation rather

than deterrence.

2.2   Repression as a Deterrent of Protest

Just as repression can inadvertently drive more protests, it can also effectively deter dissent by making the risks of participation unacceptably high. Two core characteristics of repressive tactics—intensity and targeting—enhance their potential to suppress protest by amplifying the costs and risks for current and would-be participants.

The intensity of repressive tactics plays a crucial role in deterring protest. When repression involves severe personal consequences, such as severe injury, long-term imprisonment, or substantial financial penalties, the risks associated with dissent become more intimidating. High-intensity repression raises the stakes of participation to a level where individuals reconsider involvement, knowing that the potential consequences could be life-altering or even irreversible (Zhukov, 2023). In addition to these direct, tangible costs, intense repression generates a pervasive atmosphere of fear that further discourages participation. When states employ overt and aggressive tactics, individuals anticipate personal risks that go beyond physical harm, extending to legal repercussions and social stigmatization. For instance, Kilavuz, Grewal, and Kubinec (2023) observed that in Algeria, regions that experienced significant violence during the 1990s civil war saw lower protest participation in the 2019–2020 Hirak protests. Lingering trauma and heightened fear from past mass violence dissuaded individuals from engaging in dissent, even when underlying grievances persisted, which may have long-lasting consequences on civic engagement and political participation (Bühler & Madestam, 2023). This emotional toll, reinforced by the memory of severe past repression, illustrates how high-intensity tactics can create lasting psychological barriers to protest, deterring engagement even after active repression subsides.

While intense repression broadly deters protest by imposing severe consequences on participants, targeted repression achieves deterrence through selective disruption. Targeting precision allows repressive efforts to focus on key activists, organizational leaders, and the infrastructure of movements. By aiming tactics specifically at

influential leaders, visible supporters, or critical infrastructure, precise repression undermines the organizational backbone of protest movements, and signals heightened risks to others considering involvement. In that regard, Esberg (2021) shows how targeting movement leadership can effectively disrupt protest organization while minimizing public backlash. Similarly, Sika (2024) demonstrates that selective repression of key activists severely impacts their capacity to build and maintain the networks essential for protest coordination. Precision-targeted tactics deter broader engagement by creating a sense that the state has both the capability and intent to monitor and retaliate selectively, making it more challenging for activists to operate freely or anonymously.

These characteristics demonstrate how specific qualities of repressive tactics shape their deterrent impact. High-severity tactics alter the cost-benefit calculus by imposing substantial personal risks, while selective targeting undermines movement capacity by disrupting key organizational nodes and leadership networks. Together, these tactical dimensions help explain when repression achieves its intended effect of deterring dissent rather than provoking backlash.

3 A Theoretical Framework for Analyzing Repressive Tactics in Democracies

The mixed effects of repression on protest behavior highlight the need to examine the specific mechanisms through which state actions influence contentious politics. While repression can both mobilize and deter protest participation, these effects likely operate through distinct tactical choices that states employ to manage dissent. By focusing on specific repressive tactics in democracies, we can better understand how different forms of state response affect protest dynamics, helping to explain when and why repression leads to escalation versus deterrence. This section develops a theoretical framework that unpacks how distinct tactical choices trigger backlash or dissuasion responses.

3.1 Dimensions of Repressive Tactics

To understand how tactical choices affect protest dynamics, I propose a theoretical framework that analyzes repressive tactics along two key dimensions, as discussed in the previous section: severity and selectivity.

Severity of Repression. The severity dimension captures the level of harm or consequences that tactics impose on protesters. Severity influences the perceived costs of participation, affecting protesters' calculations about the risks involved (Lichbach, 1987). Low-severity tactics impose minimal immediate harm and may include crowd monitoring, police presence, or dispersal orders. They serve as signals of state awareness but may not significantly deter committed activists. High-severity tactics involve substantial harm or penalties, such as physical assault, use of lethal force, or long-term imprisonment. These tactics can increase the perceived costs of protesting, potentially deterring participation.

Selectivity of Repression. The selectivity dimension refers to whether repression is applied indiscriminately across a broad group or selectively targeted at specific

individuals or groups. Selectivity affects how the public perceives repression and can influence the potential for backlash or solidarity (Kalyvas, 2006). Selective repression focuses on key activists, leaders, or specific groups deemed threatening. It aims to disrupt organizational capacity while minimizing widespread dissent. Indiscriminate repression is applied broadly without distinguishing between participants and non-participants. It can generate collective grievances and increase solidarity among the population.

3.2 Mechanisms Linking Repressive Tactics to Protest Behavior

The interaction between the severity and selectivity dimensions produces four distinct combinations of repressive tactics, each with unique implications for protest behavior. Table 1 maps these combinations and their associated mechanisms, providing a systematic framework for analyzing how different tactical choices influence protest dynamics. The table's vertical axis represents the severity of repression, capturing the intensity of consequences imposed on protesters, while the horizontal axis represents selectivity in the application of these tactics. Each cell identifies the primary mechanisms through which that combination affects protest behavior, clarifying whether the expected outcome is backlash, deterrence, or no effects. These mechanisms explain how tactical choices translate into movement responses, helping to understand when repression will lead to escalation versus suppression.

Table 1: Dimensions of Repressive Tactics

		SELECTIVITY	
		Low (Indiscriminate)	**High (Selective)**
SEVERITY	**High**	Expected backlash through: - Increase of grievances - Fostering of solidarity - Undermining of state's legitimacy	Expected deterrence through: - Deterrence of key actors - Disruption of networks - Reduction in coordination capacity
	Low	Expected null effect due to: - Normalization of repression - Ineffective deterrence - Tactical adaptation by protesters	Expected deterrence through: - Minimization of public backlash - Strategic deterrence - Gradual participation decline

High Severity and Indiscriminate Repression. When authorities employ severe tactics indiscriminately—such as mass shootings, widespread use of lethal force, or mass arrests without distinguishing between participants and bystanders—this approach is likely to provoke a *backlash effect*. Indiscriminate high-severity repression increases grievances by broadly targeting the population, intensifying anti-government sentiments (Gurr, 1970). The shared experience of severe repression fosters solidarity among protesters and the general public, strengthening group identity and collective resolve to oppose the state (Opp, 1994). Moreover, the excessive and unjust nature of indiscriminate severe repression undermines the state's legitimacy in the eyes of both domestic and international audiences, leading to increased dissent and potential escalation of protests (Francisco, 2004).

High Severity and Selective Repression. Selective application of severe consequences, such as prosecuting key organizers, harsh legal penalties against key organizers, and the employment of excessive force against specific activists, is expected to have a *deterrence effect*. By imposing high costs on specific individuals who are central to the movement, the state aims to deter these key actors from continued involvement and to discourage others from assuming leadership roles (Lichbach, 1987). The removal or incapacitation of movement leaders disrupts the movement's

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coordination, communication, and strategic planning, reducing its effectiveness and ability to mobilize resources (Earl, 2011).[4]

Low Severity and Indiscriminate Repression. Applying mild tactics broadly, such as general surveillance, frequent identity checks, or the enforcement of minor legal infractions, is unlikely to affect subsequent mobilization. The low severity of the consequences may not sufficiently discourage participation, especially among highly motivated protesters committed to the cause. Widespread low-level repression may also lead to the normalization of such tactics, where the public becomes desensitized, reducing their effectiveness over time (Davenport, 2005). Additionally, protesters may adapt tactically to these measures, developing strategies to mitigate their impact or using the repression to garner sympathy and support. In this combination, neither strong deterrence nor significant backlash is likely. The mild nature of the tactics fails to impose substantial costs, while the indiscriminate application does not target key vulnerabilities within the movement. Therefore, the overall impact on protest behavior is limited.

Low Severity and Selective Repression. Selective use of mild tactics—such as targeted surveillance, administrative harassment, or warnings issued to specific activists—is more likely to achieve *deterrence* while minimizing public backlash. By focusing on key individuals, authorities aim to subtly discourage participation and strain organizational capacities without attracting widespread attention or outrage. Targeted individuals may reassess their involvement due to perceived personal risks, leading to a gradual decline in participation among core activists (Earl, Soule, & McCarthy, 2003). The low severity of the tactics reduces the likelihood of provoking sympathy or solidarity from the broader public, thereby limiting the potential for backlash. In democratic settings, this approach allows authorities to manage dissent effectively within legal and normative constraints.

3.3   Scope Conditions

In democracies, three key factors shape how repressive tactics influence protest behavior. First, legal norms, media scrutiny, and electoral accountability constrain the use of high-severity and indiscriminate repression (Davenport, 2007b). Authorities are thus more likely to employ low-severity and selective tactics to manage dissent while maintaining legitimacy. Second, the visibility of repression is heightened through media coverage and social networks, which can rapidly document and disseminate evidence of police actions. Third, expectations about appropriate police behavior mean that even relatively mild forms of repression may generate significant public backlash if perceived as violating institutional norms.

These conditions suggest that the findings about tactical effects should replicate in other democracies with strong media institutions and civilian oversight of police. However, the results may not extend to authoritarian contexts where visibility is limited, institutional constraints are weak, and public expectations of police behavior differ substantially. Similarly, in countries experiencing democratic backsliding or where police forces retain significant autonomy from civilian control, the relationship between tactical choices and protest responses may follow different patterns. Understanding these scope conditions helps explain why similar repressive tactics can produce different outcomes across political contexts.

4 Context: The Chilean *Estallido*

The *Estallido Social* ("Social Outburst") in Chile, which began in October 2019, was not merely a localized event but an important case for understanding the dynamics of police repression and its effects on socio-political landscapes. Characterized by widespread daily manifestations and significant public engagement across multiple localities, this protest cycle sheds light on broader patterns of state response to collective dissent. Its nearly six-month duration provides a unique perspective on the repression-contention nexus over time, beyond isolated incidents. Thus, the *Estallido* serves as a valuable case for exploring how various repressive strategies influence public mobilization trends, providing insights into the complex balance between state coercion and the resilience of protest movements worldwide.

After the return of democracy following the 1988 plebiscite that ended Augusto Pinochet's dictatorship, multiple social movements developed in Chile, the most emblematic being the student movements of 2006 and 2011. Even though the student movement achieved significant political victories, such as the repeal of the General Education Law (*Ley General de Educación* in Spanish, LGE), and maintained steady protest activities throughout almost entire academic years, neither the 2006 nor the 2011 movement matched the level of protest frequency and sustained turnout of the 2019 *Estallido*. What unfolded over almost six months was a sustained routine of protest activity with little to no top-down organization. In Santiago, people gathered almost every afternoon in Plaza Baquedano, one of the most crowded places in the city, with Fridays being the most popular days for protests. Similar dynamics occurred in other cities. According to data provided by the national police (*Carabineros*), over 2,500 protest events occurred across the country during this period (see Appendix E.3).

The protests and riots started in the capital after the announcement of an increase in public transportation fares of 30 Chilean pesos, but they quickly spread to other cities. After the announcement of the tariff increase, students from several public high schools in the capital organized mass evasions of public transport, specifically in subway stations (Baeza, 2019). During the following week, police officers were constantly monitoring the

entrances of the stations, closing accesses to have greater control over the transit of pedestrians. The most critical stations were closed for several hours per day, especially during the evenings, when most people get off work. On the afternoon of Friday, October 18, the situation escalated after thousands of people were not able to commute from their jobs to their homes. During that night, multiple subway stations were set on fire. While most demonstrations remained peaceful, some protesters engaged in tactical escalation, including barricades, stone-throwing, and arson. These dynamics created a cycle where property destruction often preceded intensified police responses (Somma et al., 2020).

Figure 1 illustrates the distribution of protest events over time, alongside several key political moments that shaped the opportunity structure for mobilization. Two critical government responses—the announcement of the *Nueva Agenda Social* and the November 15 agreement to hold a plebiscite—marked attempts to address the growing unrest through institutional concessions. While these represented significant political opportunities, neither succeeded in diminishing protest activity. The November 15 agreement, though securing a path to constitutional reform, appeared to sustain mobilization by demonstrating the effectiveness of protest tactics. This persistence of protests suggests that institutional responses that fell short of addressing fundamental structural demands may have actually reinforced protesters' resolve.

Figure 1: Nationwide Distribution of Protests and Repression Events with Key Events
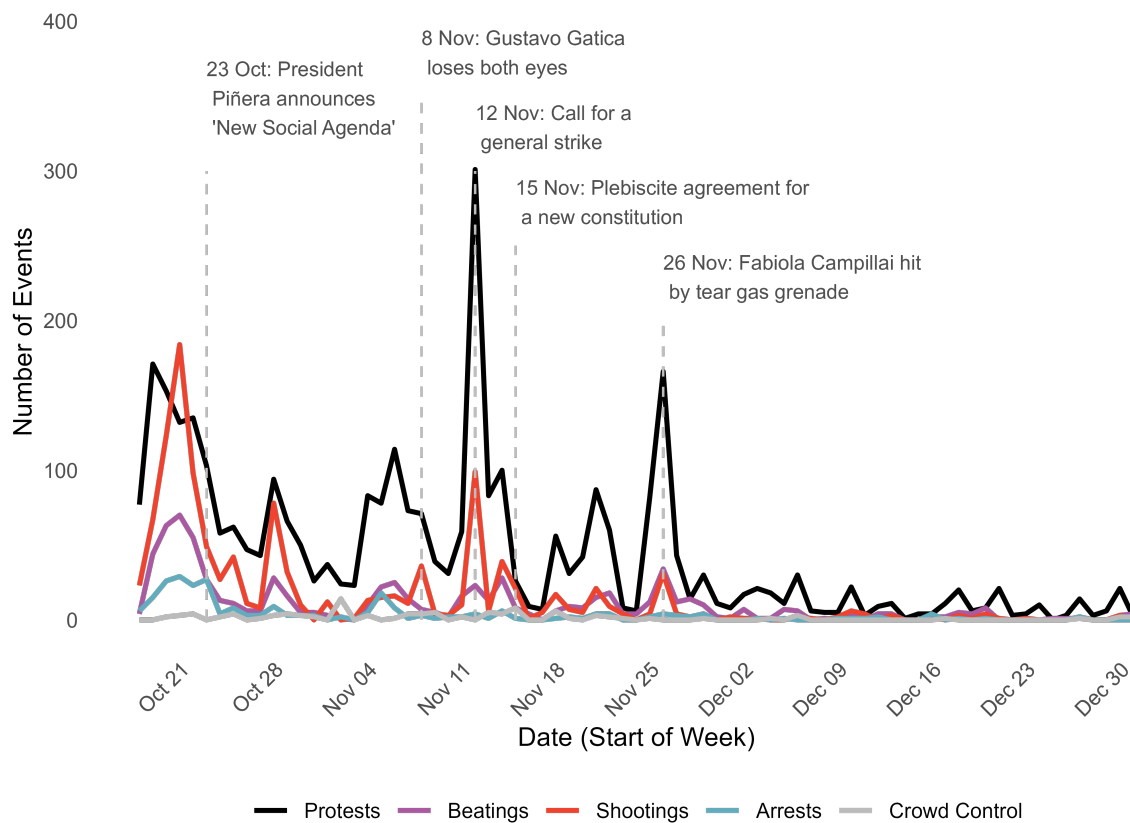
Note: Based on Centre for Social Conflict and Cohesion Studies (2020) protest data and INDH (2020) data on repressive events.

As a response to the fires in the subway stations, President Sebastián Piñera declared a state of emergency and a subsequent curfew that started on October 19. Riots occurred in other parts of the country during that weekend, and the repressive actions of the police exacerbated social unrest. These actions by Carabineros, while extreme, were consistent with their historical pattern of excessive force, a legacy of their institutional culture dating back to the dictatorship period. Government support for police actions ultimately translated into more social unrest and discontent. Despite the constant pressure from the Government to 'return to normality,' the feeling that their measures were not aimed at structural reforms, coupled with high levels of repression, ultimately generated a constant state of skepticism and anger among the population. Protests and riots lasted until the COVID-19 outbreak in mid-March 2020, when strong restrictions on gatherings were imposed.

According to data provided by Carabineros, almost five million people took part in the protests between October and December 2019.[5] Despite this high turnout, demonstrators were severely repressed. The level of repression, exercised mostly by Carabineros but also by other law enforcement institutions such as the military and the marines, was unprecedented in the democratic history of the country. International organizations such as Human Rights Watch and Amnesty International acted as observers and continuously called out the disproportionate use of force against protesters and persistent non-compliance with protocols, which resulted in thousands of people suffering eye injuries caused by rubber bullets (Amnesty International, 2020). The severity of the accusations against Carabineros and their practices caused considerable outrage among the population. Abuses were not limited to the streets but also occurred in other places. Media reports highlighted several cases of detainees being undressed in police stations (INDH, 2019), along with other instances of gender-based violence, such as rape threats (Rojas, 2019). Given that the frequency and participation levels of protests remained relatively stable over the following months, despite the variety and intensity of repressive actions being committed, it is worth examining the effect of these repressive actions and whether they were linked with an increase in protest activity.

5   Research Design

5.1   Variables and Measurement

I use data on protest occurrences collected by the Social Conflict Observatory (Centre for Social Conflict and Cohesion Studies, 2020), a research initiative that systematically identifies conflicts in Chile through detailed press analysis. This measurement considers contentious actions as the primary unit of study, defined as how an actor, group, or social movement articulates collective grievances in the public sphere at a particular time and location. The Observatory surveys a broad range of media sources, including national newspapers and regional dailies, to ensure comprehensive coverage of various types of conflict, with a particular focus on those affecting local communities. I included all events classified as contentious activities during the period from October 18 to December 31, 2019[6] The data also includes the specific location (municipality) and date of each occurrence.

I complemented the protest occurrence data with information on repressive actions by law enforcement, provided by the Chilean Institute of Human Rights (INDH). The INDH is an autonomous public entity, and although it is publicly funded, it does not depend on any state power. During the 2019 protest cycle, the INDH was a key actor in documenting and reporting wrongdoings by law enforcement officers. The INDH produced an extensive database containing all judicial actions by civilians who claim to have been subjected to any type of abuse, excessive violence, or violation of basic rights by state agents. The fact that this database was compiled based on civil lawsuits reduces the risk of reporting bias since it is not at the discretion of the administrative entity which cases to record and which to omit.[7] The original database includes 22 types of repressive actions, of which I considered only the four with the highest occurrence[8], which comprise over 85% of the total repressive events (see Table A.1). For each of these actions, I recorded the total number of repressive events in each category, by municipality, on a specific date. Details about the full set of categories and their distribution are available in Appendix A.

By integrating these two sources of information, I constructed a time-series database covering 346 municipalities over 74 days, resulting in a final dataset of 25,604 observations. Table 2 summarizes the distribution of repressive actions and contentious events by region (Metropolitan and the rest of the country), month, and type of repressive action.

Table 2: Distribution of repressive actions and contentious events

	Repressive actions	Protest events
Region		
Metropolitan Region	34.19 (787)	22.39 (743)
Other Regions	65.81 (1,515)	77.61 (2,575)
Type of Repressive Action		
Arrests	11.21 (258)	
Beatings	32.58 (750)	
Crowd Control (Tear Gas/Water Cannon)	4.47 (103)	
Rubber bullets shootings	51.74 (1,191)	
Month		
October 2019	56.26 (1,295)	36.68 (1,217)
November 2019	38.01 (875)	54.07 (1,794)
December 2019	5.73 (132)	9.25 (307)
Total (N)	2,302	3,318

Note: Entries in percentages with N in parenthesis.

5.2 Estimation

Following Sudduth and Gallop (2023), I use a generalized linear mixed model (GLMM) to address overdispersed protest and police repressive event data, as well as the presence of zeros caused by municipalities that did not have protests or repressive events on a given day, leading to rows containing only zeros.[9] This approach enables me to account for specific dispersion parameters in the dependent variable.[10] Additionally, following the literature on temporal dynamics in contentious politics, I included lagged explanatory variables for both protest events and repressive actions. While lagged variables help capture immediate temporal relationships, I recognize the methodological challenges they present for count models with overdispersion (Beck & Katz, 2011; Brandt et al., 2000).

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Although the zero-inflated negative binomial (ZINB) approach employed here addresses overdispersion and excess zeros (Sudduth & Gallop, 2023), including lagged dependent variables in such models might not fully resolve issues of temporal dependence. To assess the robustness of findings to different specifications of temporal dynamics, I conducted additional analyses that exclude lagged dependent variables (see Table B.2 in Appendix B).

The outcome $Y_{i,t}$ is the observed count of protest events for municipality i on day t, which follows a distribution of $Y_{i,t} \sim ZINB(\psi_{i,t}, \lambda_{i,t}, \phi)$. $Y_{i,t}$ is a structural zero with probability $\psi_{i,t}$ (the zero-inflation component), or otherwise, a count with expected value $\lambda_{i,t}$ and overdispersion ϕ to estimate the count component $log(\lambda_{i,t})$. Therefore, the estimated models have the following structure:

$$Protest\ Events_{i,t} \sim ZINB(\psi_{i,t}, \lambda_{i,t}, \phi) \tag{1}$$

where:

$$\psi_{i,t} = Logit(\beta_0 + \beta_m Z_{i,t-k} + \mu_i) \tag{2}$$

and:

$$log(\lambda_{i,t}) = \gamma_0 + \gamma_n X_{n,i,t-k} \tag{3}$$

In Equation 2, β_0 is the intercept in the zero-inflation model, representing the baseline log odds of a protest event being a structural zero. β_m represents the coefficients corresponding to each zero-inflation predictor represented by $Z_{i,t-k}$ for each municipality i lagged by $t - k$.[11] In Equation 3, γ_0 is the intercept term in the count component model, representing the baseline log count when all predictors are at their reference levels, and γ_n are the coefficients corresponding to each count component predictor with $X_{n,i,t-k}$ being the count component predictors for each municipality i lagged by $t - k$. Finally, ϕ represents the overdispersion parameter in the ZINB distribution, which is critical for modeling the extra variability in the count data.

6 Results

Figure 2 illustrates the distribution of repressive actions across the country, spanning from October 18 to December 31, 2019. These actions are notably concentrated in the Metropolitan Region, especially within the Province of Santiago. This pattern corresponds closely with the high density of protests observed in this region. The question arises: is there a relation between the distribution of repressive actions and subsequent protest activities?

Figure 2: Number of Repressive Actions by Municipality
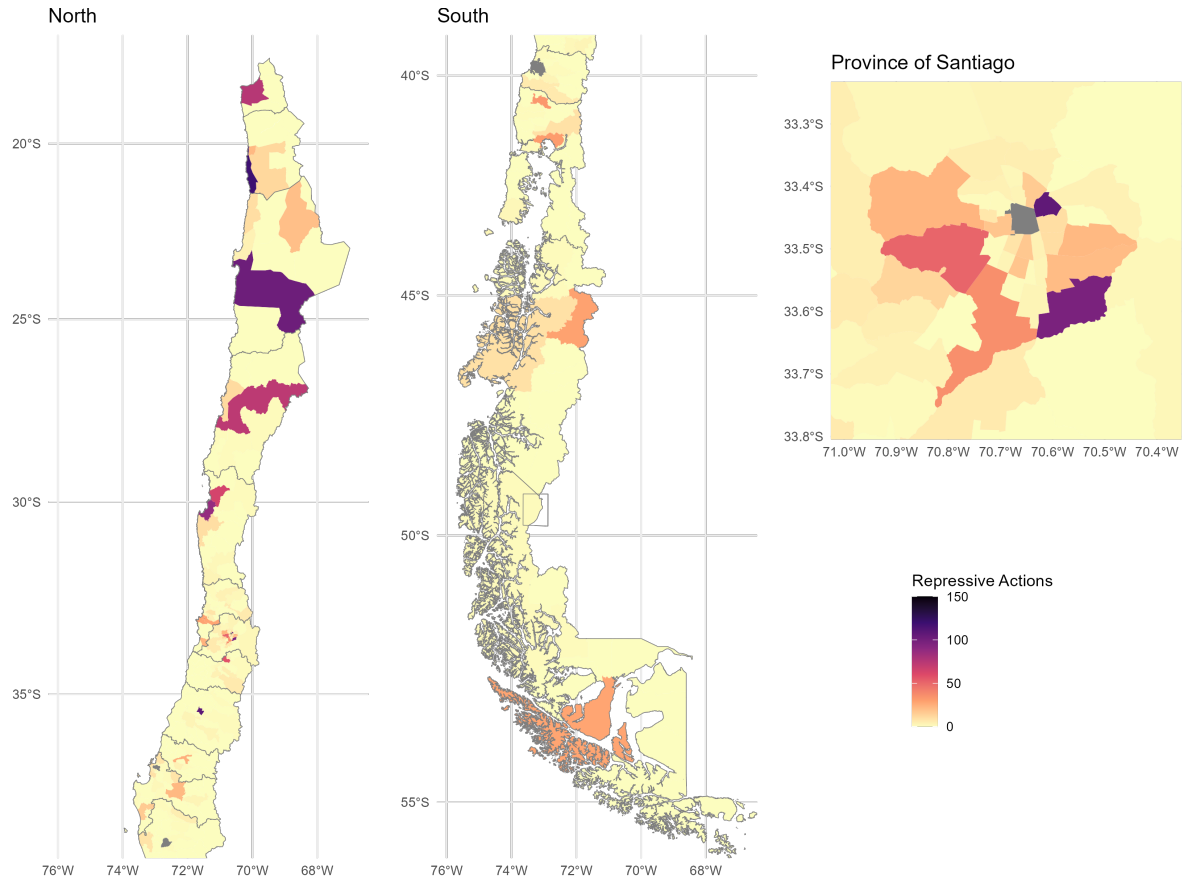
Note: The top right panel zooms into the Province of Santiago.

Since I am interested in exploring how previous acts of repression affect subsequent protest events, I estimated the ZINB models with three main specifications. The first model includes lagged independent variables for the day before the protests, both for the type of repression and for the protests that occurred the day before. The second model

includes the accumulation of repression and protests for the three days prior. Finally, a third model includes the accumulation of the seven days prior.[12] The full models are available in Table B.1. To ease interpretation, I present plots of the predicted effects at different levels of repressive actions based on these models.

Beatings (High Severity, High Selectivity). Beatings represent a particularly severe form of repression, as they involve direct physical force that can result in serious injury. Unlike widespread crowd control methods such as tear gas, beatings typically require close-range contact and target specific individuals rather than dispersing crowds. This tactical choice reflects both high severity in its potential for harm and high selectivity in its targeted application. Drawing on the theoretical framework presented earlier, we would expect such a high-severity, selective tactic to primarily generate deterrence rather than backlash.

Figure 3 reveals a more complex reality, showing how beatings influenced subsequent protest frequency across different time intervals. In the immediate term (one-day lag), beatings had a modest positive association with protest activity—contrary to the theoretical expectation of deterrence. This mobilizing effect became slightly more pronounced when examining cumulative beatings over the three-day period. However, the relationship notably flattens in the seven-day window, with the predicted effect remaining relatively constant regardless of beating frequency. This pattern suggests that while beatings generated short-term protest mobilization, potentially due to moral outrage and solidarity responses, their effect neither escalated nor diminished substantially over longer periods.

Figure 3: Predicted Impact of Beating of Demonstrators on Protest Frequency
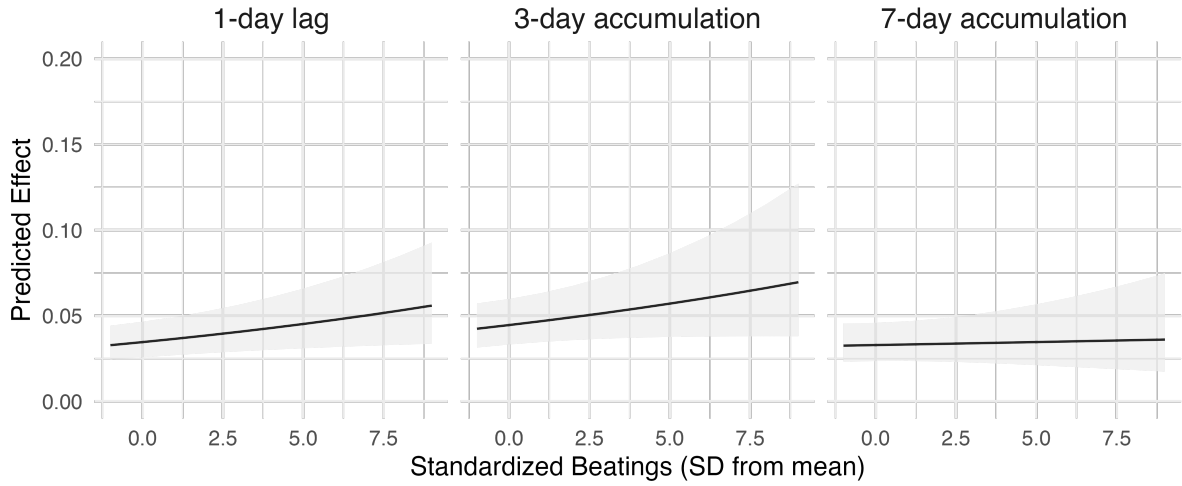
Note: Predicted effect based on models available in Table B.1. C.I.s at 95%.

Rubber Bullet Shootings (High Severity, Lower Selectivity). Rubber bullet shootings represent another high-severity repressive tactic, as they can cause serious physical injuries, including permanent eye damage, particularly a salient issue during the Chilean protests where thousands suffered eye injuries. Unlike beatings, however, rubber bullets are typically fired into crowds rather than at specific individuals, making them less selective. According to the theoretical framework, this combination of high severity and low selectivity should produce a strong backlash effect through increased grievances and solidarity among protesters.

Figure 4 shows how rubber bullet shootings influenced subsequent protest activity across different time windows. In the immediate term (one-day lag), shootings had a modest positive association with protests, with the predicted effect increasing from 0.03 to 0.05 as incidents increased. This mobilizing effect strengthened over three-day periods, with predicted probabilities rising from 0.04 to 0.07. However, the relationship flattens considerably in the seven-day window, suggesting the mobilizing impact of rubber bullet incidents diminished over longer periods. This pattern likely reflects protesters' tactical adaptation to this form of repression. As the protests evolved, participants increasingly came prepared with protective gear like safety goggles, helmets, and makeshift shields, reducing the deterrent effect of rubber bullets. While the observed short-term backlash

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aligns with theoretical expectations, the modest size of these effects and their quick diminishment suggests that protesters' defensive innovations and the normalization of this repressive tactic reduced its impact over time.

Figure 4: Predicted Impact of Rubber Bullet Shootings on Protest Occurrence
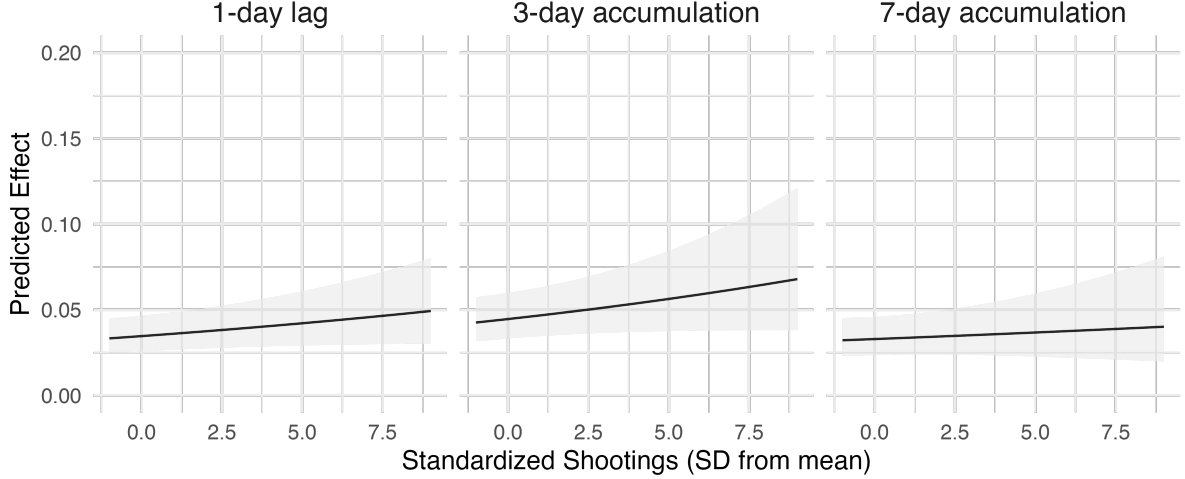
Note: Predicted effect based on models available in Table B.1. C.I.s at 95%.

Arrests (Low Severity, High Selectivity). Arrests represent a low-severity form of repression in the Chilean context, particularly as most protest-related arrests did not result in warrants or long-term legal consequences (see Section E.4). While arrests can impose social and temporary legal costs, they typically do not cause immediate physical harm like beatings or rubber bullets. Arrests are generally highly selective, as law enforcement must identify and apprehend specific individuals rather than acting on crowds indiscriminately. Based on the theoretical framework, this combination of low severity and high selectivity should produce modest deterrent effects.

Figure 5 reveals a pattern that contradicts these theoretical expectations. The one-day lag shows a slight positive relationship between arrests and protests, which strengthens over the three-day accumulation period. Most notably, the seven-day window shows the strongest positive relationship, suggesting that arrests actually enhanced mobilization over longer time periods. While confidence intervals widen with longer time windows, the consistently positive and strengthening relationship suggests that arrests, despite their selective nature, contributed to sustained protest activity

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rather than deterrence.

Figure 5: Predicted Impact of Arrests on Protest Frequency
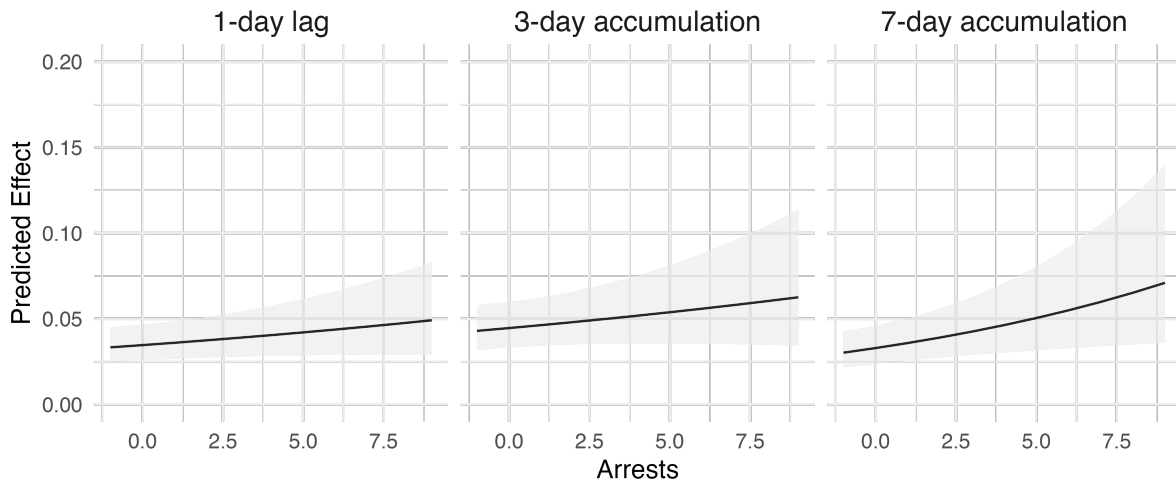
Note: Predicted effect based on models available in Table B.1. C.I. at 95%.

Crowd Control Techniques (Low Severity, Low Selectivity). Crowd control techniques like tear gas and water cannons are classified as low severity because they typically cause temporary discomfort rather than lasting harm when applied according to protocols.[13] These methods are also low in selectivity, affecting broad areas of demonstrations without distinguishing between participants; tear gas, for instance, spreads through the air affecting anyone in its vicinity. According to the theoretical framework, such low-severity and low-selectivity tactics should have minimal impact on protest behavior.

Figure 6 shows how these tactics influenced protest frequency. The one-day lag reveals a modest positive relationship, with protest probability increasing slightly as crowd control intensity rises. This relationship becomes more pronounced over longer periods—both three-day and seven-day accumulations show steeper positive slopes. These findings suggest that, rather than having minimal effect as theoretically predicted, crowd control techniques generated increasing mobilization over time, with the strongest effects appearing in longer time windows.

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Figure 6: Predicted Impact of Crowd Control Techniques on Protest Frequency
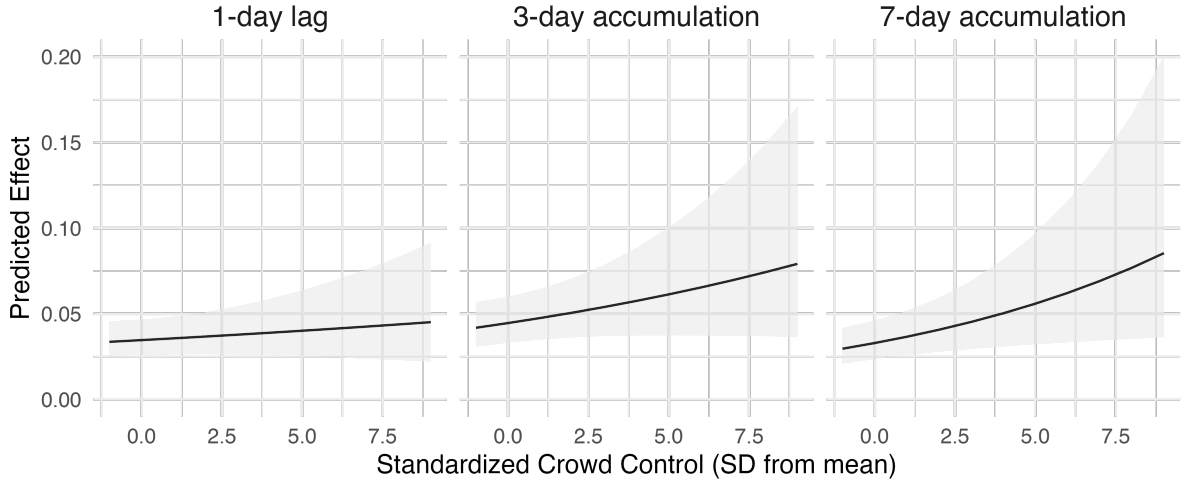
Note: Predicted effect based on models available in Table B.1. C.I. at 95%.

6.1   Robustness Checks

Media Coverage   A key mechanism through which repression might affect protest behavior is media coverage, which can amplify the visibility of repressive actions beyond their immediate location. As discussed earlier, visible repression can incite further protests by creating shared awareness of state aggression and intensifying grievances beyond those directly affected. In this way, media coverage makes repressive actions observable to a wider audience, potentially transforming passive observers into active participants. To examine this mechanism, I analyze how media-reported incidents of state violence against civilians influenced subsequent protest activity. The media analysis helps capture cross-municipal spatial dynamics of repression effects that complement the local-level analysis. While local repression data captures immediate tactical interactions between protesters and police, media coverage reveals how information about repression spreads and influences protest behavior across municipal boundaries over time. Compared to the previous analysis, which relied on INDH administrative data based on individual complaints, this analysis uses ACLED data (Raleigh et al., 2023), which captures events reported in national news media. Using this data source, I consider events when they are coded as violence against civilians

and, in addition, when they occur in the framework of political disorder events and involve state actors (police or military) against civilians.

Table 3 reveals that media coverage of police violence had an increasingly strong positive relationship with protest occurrence over time. The effect is most pronounced in the seven-day accumulation window, where each additional reported incident is associated with an 18.8% increase in expected protest occurrence[14], holding other factors constant. This finding suggests that media coverage may have helped create the shared awareness of repression theorized to drive protest mobilization, particularly by making repressive actions visible across different localities.

Table 3: Estimated Regression Coefficients for Media Reports of Violence Against Civilians on Protest Occurrence

	1-day lag	3-day accumulated	7-day accumulated
Violence Against Civilians (t-1)	−0.125 (0.166)		
Violence Against Civilians (3-day)		0.099 (0.111)	
Violence Against Civilians (7-day)			0.172** (0.088)
Num.Obs.	22.422	21.816	20.604
R^2 Marg.	0.053	0.050	0.026

Note: Models controls include past protest events, police deployment per 100,000 inhabitants, rain, temperature above 30 degrees Celsius, a binary variable that indicates a weekday or weekend, and distance of the municipality to the regional capital. All continuous variables are standardized (mean = 0, SD = 1). Weather variables and weekday category remain in their original units. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Standard errors in parentheses. Full models available in Table C.1.

The strong positive effect of media-reported violence on civilians in the context of demonstrations helps contextualize the findings from the INDH administrative data. While both data sources show that repression generated protest mobilization, the INDH data reveals more varied temporal patterns across different tactical choices. The fact that similar mobilizing effects appear in both individual complaints (INDH) and media coverage (ACLED) strengthens confidence in the overall finding that repression increased rather than deterred protest activity during this period. However, the larger effect size in media-reported incidents, compared to the more modest effects found in the INDH data, suggests that widely publicized acts of repression may have been particularly powerful in generating protest mobilization, aligning with theoretical expectations about

the importance of visibility in shaping protest responses to repression.

Political Opportunities and Movement Resources The effects of repression on protest behavior likely depend on the broader mobilization context in which they occur. Social movement theory has long recognized that political opportunities and organizational resources fundamentally shape collective action capacity and strategic responses to state actions (McAdam, McCarthy, & Zald, 1996; Tarrow, 1994). To examine how these contextual factors condition repressive tactics' effects, I incorporate key measures of both dimensions into the analysis. For political opportunities, I use pro-government vote share from the last presidential election, as lower government support signals greater opportunities for challengers who face reduced legitimacy constraints (Klein & Regan, 2018; Su, 2015). For movement resources, I include three indicators at the local level: labor strike count, number of tertiary educational institutions, and opposition party representation in municipal councils. Labor strikes reflect organized working-class mobilization capacity; educational institutions serve as organizational hubs for student and youth activism; and opposition representation in local government reflects pre-existing political networks that can facilitate mobilization. This approach aligns with research showing that organizational presence and prior mobilization effectively capture the accumulated experience, tactical knowledge, and informal networks that facilitate collective action (Chenoweth & Belgioioso, 2019; Larson et al., 2019). By incorporating these variables as both controls and interaction terms, I assess whether the effects of specific repressive tactics are conditional upon political environment and local mobilization capacity.

Results from Table C.2 in Appendix C confirm that while these factors influence protest dynamics, the main repression effects remain robust. Labor mobilization strongly predicts protest activity, and government electoral support in the last election reduces it. The interaction models reveal that beatings generate less protest where labor mobilization is stronger, crowd control techniques are less effective where opposition presence is high, and both tactics generate more protests in historically

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pro-government areas. These findings indicate that while resources and opportunities shape protest dynamics, they do not explain away the backlash effects of repression identified in the main analysis.

Lastly, as mentioned in Section 5.2, to address the methodological concerns about temporal dependence raised in the count data literature (Brandt & Williams, 2001; Brandt et al., 2000), Table B.2 in Appendix B presents alternative specifications that exclude lagged dependent variables. The results from these models maintain the same substantive patterns as the main specifications, with some notable differences in effect magnitudes. Without conditioning on previous protest levels, the coefficients for repressive tactics are generally larger, suggesting that including lagged protests may produce more conservative estimates of repression's effects. However, the key findings remain unchanged: (1) beatings and rubber bullet shootings show significant positive associations with protests in the immediate term, (2) crowd control techniques demonstrate increasing effects over longer time windows, and (3) arrests exhibit stronger mobilizing effects over longer periods. This consistency across model specifications strengthens confidence in the core findings about how severity and selectivity shape protest responses, regardless of how temporal dependence is addressed.

7 Mechanisms

The results reveal a consistent pattern of protest mobilization across different forms of repression, though with varying temporal dynamics and intensities. While the severity-selectivity framework introduced in Section 3 provided initial expectations about when repression should generate backlash versus deterrence, the empirical findings suggest a more complex reality shaped by two additional factors: the visibility of repressive acts and their temporal accumulation.

First, high-severity selective tactics like beatings produced mobilization rather than the expected deterrence. Although these tactics are directed at specific individuals, presumably to neutralize key activists, beatings generated short-term increases in protest activity.[15] This deviation from theoretical expectations might be explained by the particularly outrageous nature of beatings in democratic contexts—while some degree of crowd control or arrests might be seen as within legitimate police functions, direct physical violence against civilians represents a clear violation of police duties. Such violations could generate stronger moral outrage, spread more rapidly through social media, and trigger broader solidarity responses that overwhelm the intended deterrent effect of targeting specific individuals.

High-severity, less selective tactics like rubber bullet shootings partially confirmed theoretical expectations of backlash, showing mobilizing effects in the short and medium term. However, the flattening effect over the seven-day accumulation suggests these tactics may lose mobilizing power as protesters adapt to heightened risks. This adaptation was visible in protesters' increasing use of protective equipment like safety goggles, helmets, and makeshift shields, which reduced the tactical effectiveness of rubber bullets. This temporal pattern indicates that while indiscriminate severity can trigger an immediate backlash, its influence on sustained mobilization may be more limited than theory would predict as protesters develop defensive innovations.

These findings are robust to alternative data sources. A comparison with official police ammunition records from Santiago Province—which accounts for approximately 25% of all documented repressive actions—reveals similar patterns, though with

generally stronger effect sizes than those captured in civilian reports (see Appendix C). This is particularly noteworthy for crowd control techniques like tear gas and water cannons, which are routine police responses that civilians might be less likely to formally report to human rights organizations. This suggests that while the INDH data may underestimate the magnitude of repression's impact due to underreporting of routine tactics, it accurately captures the directional effects of different tactics. The fact that I find significant effects even in potentially underreported civilian data strengthens confidence in these patterns.

Perhaps most surprisingly, low-severity tactics generated significant mobilization regardless of their selectivity. Indiscriminate crowd control techniques showed gradually increasing mobilizing effects over time, suggesting that even mild repression, when applied broadly and persistently, can accumulate grievances and trigger collective action. Similarly, selective arrests produced increasing mobilization over longer periods rather than the expected deterrence through strategic disruption. This pattern suggests that ongoing arrests may highlight systemic repression and encourage movement adaptation rather than demobilization.

While the municipal-level analysis demonstrates how different repressive tactics influenced subsequent protest activity, it cannot directly reveal why these tactics generated mobilization rather than deterrence. To explore these mechanisms, I analyze how exposure to repressive events in respondents' municipalities shaped their attitudes, using data from the CEP National Public Opinion Survey (Centro de Estudios Públicos, 2020). Details on the survey can be found in Appendix D.

Figure 7 examines how the frequency of repressive events in a respondent's municipality influenced two key attitudes: their perception of how often police committed human rights violations during the crisis, and their views on protest justification. These two measures capture distinct potential mechanisms through which repression might affect protest behavior. Perceptions of human rights violations reflect how repression shapes views of state legitimacy, while protest justification indicates whether repression makes people more or less supportive of contentious action as a

political tool.

Figure 7: Estimated Regression Coefficients for Police Repression on Public Attitudes
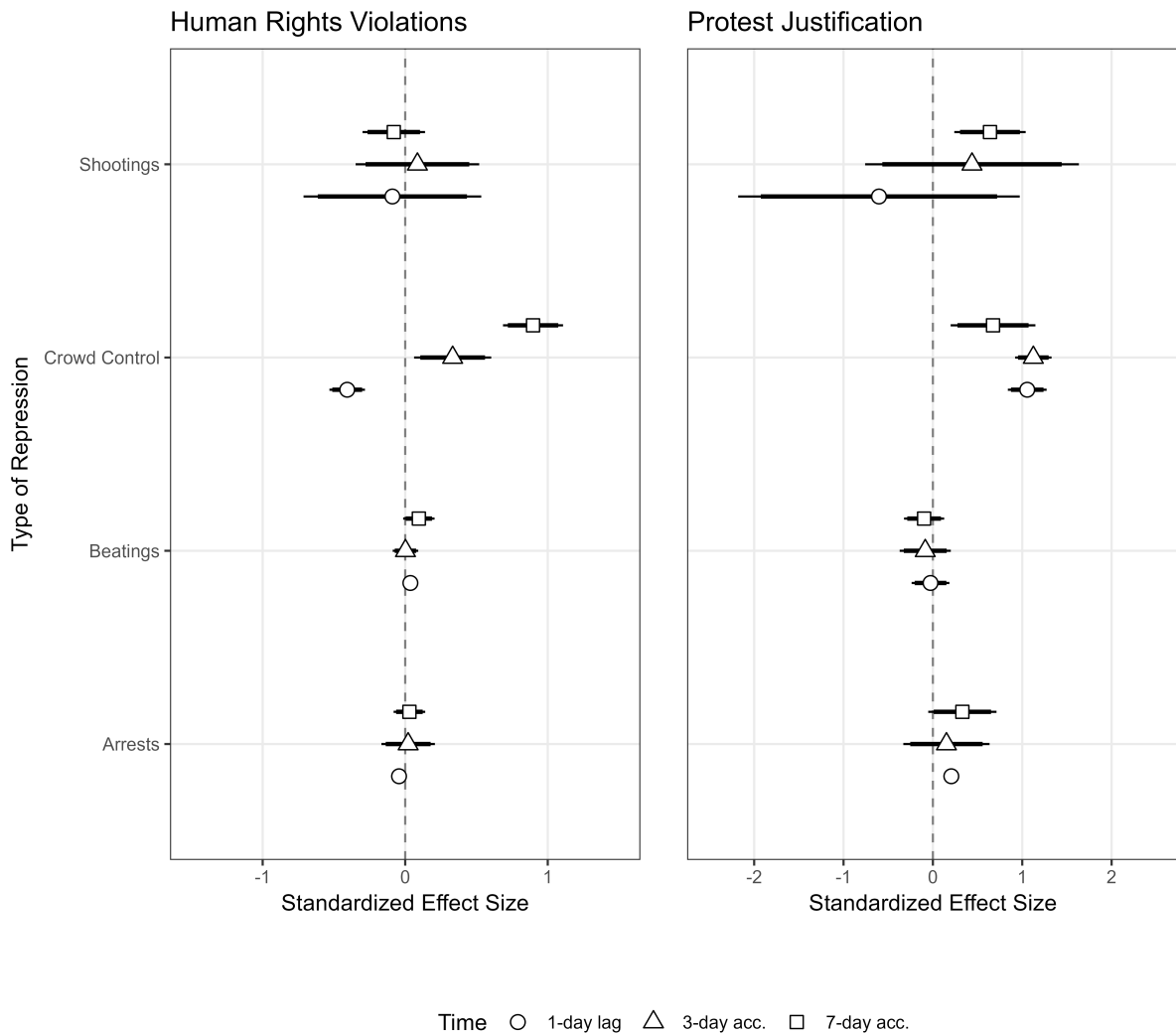
Note: Points represent standardized coefficient estimates. Thick lines represent 90% C.Is while thin lines represent 95% C.Is. Each coefficient represents a change in the dependent variable per SD increase in the repressive tactic used by police. The dependent variables are the perceived frequency of human rights violations by police (measured on a 5-point scale from 'never' to 'very frequently' during the crisis that began in October 2019) and protest justification (measured on a 5-point scale from 'never justify' to 'always justify' participation in protest marches). All models include demographic controls (age, gender, education) and municipality effects with standard errors clustered at the municipality level.

Figure 7's coefficients represent how a one standard deviation increase in repressive events affected these attitudes over different time windows, controlling for demographic characteristics and municipality-level effects. Only crowd control techniques show consistent and significant effects across both outcomes. For perceptions of human rights violations (left panel), exposure to crowd control methods has a positive effect

that becomes stronger over longer time periods, suggesting these tactics increasingly shape views of police misconduct. Similarly, for protest justification (right panel), crowd control techniques show positive effects that grow stronger over time, indicating these tactics may increase rather than decrease public support for protest activity. Other forms of repression—beatings and arrests—did not systematically influence public attitudes in either direction. The exception is shootings, which show a significant positive effect on protest justification in the seven-day accumulation window, suggesting that sustained exposure to this severe tactic may increase public support for protests even when it does not significantly affect perceptions of human rights violations. These findings align with recent work by Disi Pavlic et al. (2025), who found that spatial and temporal proximity to actively policed protests in Chile significantly increased people's willingness to justify violence against police, particularly affecting centrist voters.

The survey evidence helps explain the relationship between repression and protest mobilization observed in the municipal-level analysis. While crowd control techniques consistently shaped both perceptions of human rights violations and protest justification, other tactics showed more limited effects on public attitudes despite influencing protest behavior. This suggests different forms of repression may operate through distinct mechanisms. As Somma et al. (2020) shows in the Chilean context, sustained low-level repression can shift public sentiment over time, while more severe tactics may deepen political crises without achieving deterrence. The latter point is reinforced by González and Prem (2024), who found that even lethal repression during the Chilean Student Movement produced only small, temporary decreases in protest activity among those most directly affected. Together, these findings suggest that while repression may work through public opinion channels in some cases (as with crowd control), other tactics may influence protest through different mechanisms—such as emotional responses or solidarity networks—even when they do not significantly alter broader attitudes.

8   Conclusion

Why do specific repressive actions increase the occurrence of protests when they are supposed to do exactly the opposite? Tilly (1978) argued that state coercion increases the costs of collective action and, therefore, repression should have negative effects on mobilization. More recent studies have also shown that people engage less in street protests when their perceptions of risk and potential violence increase (Dave et al., 2020; Steinert-Threlkeld, Chan, & Joo, 2022). Recognizing that this association is very context-dependent, this paper examined how varying forms of police repression used in democratic regimes shape protest mobilization. By developing an approach that distinguishes among different levels of severity and selectivity, this paper aimed to uncover the mechanisms through which repressive tactics can both deter and trigger dissent.

This study examined how the interaction between severity and selectivity of repressive tactics shapes protest behavior in democratic contexts. Drawing on the 2019 Chilean Social Outburst, I found that the theoretical expectations about deterrence and backlash effects were only partially confirmed. Contrary to expectations that selective, high-severity repression would deter protests through targeted disruption, tactics like beatings generated short-term surges in mobilization, likely due to their severe and visible nature. Similarly unexpected, low-severity tactics produced significant mobilization regardless of their selectivity—with crowd control techniques showing gradually increasing mobilizing effects over time, suggesting that even mild repression can accumulate grievances when applied persistently. This pattern suggests that, even when repressive measures are mild, repeated applications can accumulate grievances and erode public trust, thereby fostering increased dissent. Survey evidence revealed that exposure to crowd control techniques consistently shaped both perceptions of human rights violations and protest justification, while more severe tactics like rubber bullet shootings influenced protest behavior through other mechanisms, such as emotional responses or solidarity networks, even if they did not generate widespread shifts in public attitudes. This relationship between repression and protest is further complicated by protesters' own tactical choices, as some protests

involved property destruction and violent confrontations with the police.

Assessing the consequences of such repression poses significant challenges for social movement scholars. Most sources only consider broad categories based on dichotomous classifications, such as police presence or lethal versus non-lethal tactics, limiting our understanding of how specific police actions impact protesters (Earl, Soule, & McCarthy, 2003). The scarcity and difficulty in accessing reliable data on police repression, compounded by endogeneity problems, where the propensity for dissent is influenced by repression itself, makes it a complex field to navigate (Ritter & Conrad, 2016). By developing a theoretical framework centered on severity and selectivity, and focusing on both spatial dynamics and immediate responses to police repression, this study provides more detailed characterizations of police tactics. Such granularity allows for a better understanding of the distinct impacts of different forms of repression on protest dynamics.

A key strength of this study lies in its use of multiple complementary data sources—the Observatory's press-based protest data, INDH civilian complaints, and official police records—which helps address potential measurement challenges. While the Observatory's methodology ensures comprehensive coverage of protest events, some underreporting likely remains, particularly for routine forms of repression like tear gas and water cannons that civilians might not formally report. The comparison with police ammunition records reveals stronger effect sizes than civilian complaints, suggesting the main analysis provides conservative estimates of repression's impact while accurately capturing directional effects. Additional analyses incorporating political opportunities and movement resources confirm the robustness of these findings. Even when accounting for factors such as labor movement strength, institutional infrastructure, and local political context, the core patterns of how repressive tactics influence protest behavior remain consistent, strengthening confidence in the validity of the identified severity-selectivity dynamics.

These measurement issues point to broader limitations in studying repression and protest dynamics. Replicating this study in other contexts might be challenging,

particularly in countries with limited media independence or where state control over media networks prevents reliable accounts of both protests and repression. Moreover, this study's insights may not fully extend to authoritarian regimes or countries experiencing democratic backsliding, given the relative legitimacy of Chile's national police and the moderate risks faced by protesters compared to places where severe repression is more common. Additionally, while this study identifies a backlash effect in protest occurrence, it does not capture variations in protest size, which could exhibit different patterns in response to state violence (Steinert-Threlkeld, Chan, & Joo, 2022), leaving unanswered questions about the characteristics of protests that follow repressive acts. The severity-selectivity framework helps explain why conflicting results in the literature may emerge when different repressive actions are grouped together, highlighting the importance of context-specific data collection. Despite these constraints, the results offer valuable insights into the effects of police strategies on protests, providing a launching point for further investigation into the relationship between state actions and public response and adding to existing research on the effects of the *Estallido* (Castro & Retamal, 2024).

Future research should incorporate a geographical comparative lens to investigate potential regional variations in protest responses to repression. In Chile, conflict dynamics have historically been regionally distinct: the south is known for the Mapuche conflict, while environmental issues predominantly spark contention in the central and northern regions. Examining how these geographical distinctions influence responses to police violence could provide valuable insights. Additionally, the surprising finding that selective high-severity tactics generated mobilization rather than deterrence suggests the need to better understand the emotional underpinnings of state coercion, particularly how repression can generate outrage and, in turn, fuel mobilization, especially in democratic contexts where expectations about appropriate police behavior may heighten public responses to violence. Future studies should aim to identify which specific forms of repression are most likely to provoke these strong emotional reactions and the underlying reasons for these responses, acknowledging that

conceptualizing backlash solely in terms of protest frequency simplifies its complex nature. Important dimensions such as shifts in tactics, protester demographics, movement sustainability, and broader expressions of resistance (Ellefsen, 2021; Hager & Krakowski, 2022) remain understudied, pointing to the need for more comprehensive analyses of repression's manifold consequences.

Notes

[1]Mass Mobilization Protest Data (Clark & Regan, 2016) shows an upsurge in protest occurrence after 2013, as illustrated in Figure E.1.

[2]ACLED data (Raleigh et al., 2023) reveals a substantial rise in violence against civilians by state forces in recent years (see Figure E.2).

[3]Refer to Davenport (2005) and Earl (2011) for comprehensive reviews.

[4]While there is a risk of creating martyrs that could inspire further mobilization due to heightened grievances and perceptions of injustice (Hess & Martin, 2006), the targeted nature of the repression often limits widespread public backlash. By focusing on key figures rather than the general populace, authorities minimize the collateral damage that typically provokes mass dissent. In democratic contexts, such tactics are more feasible within legal frameworks (e.g., arresting individuals on specific charges) and can be justified as enforcing the rule of law, thereby maintaining the state's legitimacy while effectively deterring core activists.

[5]This data was provided in response to a request through the Transparency Law (see Appendix E.3, Table E.2). Attendance is calculated based on a methodology used by Carabineros, which considers two different counting mechanisms: for low-turnout protests, the calculation is according to the assessment of the police personnel present at each event; for protests with high turnout, the calculation is based on the use of drone images and a geographical function application that divides the territory into polygons based on the density of attendees and the area in square meters.

[6]For this measurement, the Social Conflict Observatory only included protests until 2019. This poses a temporal limitation since, in actuality, protests continued until March, when they began to decline due to the pandemic. Nevertheless, the largest number of protests occurred between October and December, primarily because students are less active during the summer months (January-February) compared to the school period.

[7]Under-reporting is still possible, considering that not all victims of police abuse decide to report and file a complaint. This under-reporting could lead to false negatives, where incidents are not recorded, thus underestimating the true extent of repressive actions. However, there is certainty that the events included in this database did indeed occur at the time and place that was reported.

[8]Even when they were originally five categories, for the analyses I use four categories since tear gas and water cannon were grouped in the category 'crowd control techniques'.

[9]The analysis was conducted using the `glmmTMB` package (Brooks et al., 2022), which is designed to handle overdispersion and excess zeros in the data.

[10]For instance, protests are more frequent during weekdays than during weekends. Climate conditions, such as extreme temperatures (which are likely to occur during the summer), can also deter protests

and/or police activity. Given that the data mostly includes spring days and the start of summer, this has to be taken into account.

[11]The zero-inflation component requires identifying and including predictors ($Z_{i,t-k}$) that explain the presence of structural zeros, i.e. those that might arise due to specific conditions that effectively prevent the event from occurring, regardless of the underlying rate of occurrence. Therefore, in the context of protest events, I include the following predictors for the zero-inflation component: extreme weather conditions (temperatures over 30°C) and rainfall.

[12]The reason for including the three-day accumulation is that it captures dynamics that happen on weekends, from Friday to Sunday, and also potential delays in the reporting of repression by the media. The seven-day accumulation was constructed to capture weekly dynamics.

[13]Of course, this classification assumes proper application. During the protests, there were cases of severe injury from tear gas canisters, most notably Fabiola Campillai, who lost both eyes when a canister was thrown directly at her face.

[14]Calculated as $[\exp(0.172) - 1] \times 100 = 18.8\%$

[15]A predicted effect of 0.03 protests indicates an expectation of approximately 3 protests per 100 days under similar conditions, reflecting a long-run empirical expectation rather than a literal fractional event.

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Online Supplementary Information

Deterrence or Defiance? How Severity and Selectivity Shape Protest Responses to Repression

July, 2025

A   Data and Variables

A.1   Repressive Acts During the Chilean Social Crisis

The repression faced by protesters during the so-called "social outburst" that took place from October 2019 to March 2020 caused great concern both in the national and international community. Reports elaborated by Amnesty International and Human Rights Watch provided valuable information regarding the police abuse and human rights violation that occurred during the initial months of protest. A longer-standing record was elaborated by the National Institute of Human Rights (*Instituto Nacional de Derechos Humanos*, INDH). The INDH is a Chilean organization founded in 2005, although officially constituted in 2010, in charge of the promotion and protection of human rights within the national territory. One of its functions is to "communicate to the government and different state organisms its opinion about situations regarding human rights inside the country", about which INDH is entitled to both request and elaborate reports.

In the context of the *social outburst*, the INDH elaborated a first report containing information from October 17 to November 30, 2019, where they systematize, describe, and analyze the serious human rights violations within this period (INDH, 2019). Intending to contribute to the clarification of the truth and obtain justice and reparation for victims of human rights violations, the INDH made available to researchers, academics, and citizens in general, a database with the information contained in the legal actions filed by the INDH to denounce the events that occurred between October 2019 and March 2020, in the context of the social crisis (INDH, 2020).

A.1.1   Conceptualizing Human Rights Violations

The glossary that accompanies the database "Human Rights Violations in the Context of the Social Crisis" defines the concept of "human rights violation" as any action or omission that deprives the enjoyment of rights guaranteed, nationally or internationally, to a person or group of persons. This definition engages the responsibility of the State,

since "a State directly engages its international responsibility when its agents violate the human rights of persons under its jurisdiction".

A.1.2   Acts Denounced by Victims

The database in question was elaborated by a specific department within the INDH (Studies and Memory Unit), which coded and processed the content of all the briefs filed by the INDH in courts to denounce human rights violations in the context of the social mobilizations that occurred between October 2019 and March 2020. The final product combines information from three nested sources: the victims, the judicial actions (complaints and denounces), and the actual facts denounced.

Among the acts denounced in the database, which were later recoded to create the final four types of repressive acts, are the following, along with the descriptions. Each description is a construction based on the facts reported by the victims.

1. Asphyxia: the act of being subjected to the obstruction of the respiratory tract by one or more state agents, through the use of arms, plastic bags, or other elements.

2. Attack with animals: the act of being attacked by animals acting on the orders of agents of the state, such as dogs, horses, or others.

3. Beating: the act of being assaulted by one or more state agents, either with blows of the fist, kicks, or blunt objects.

4. Breaking of telephone: the act of having one's cell phone destroyed by state agents, preventing the detainee from communicating or recording events.

5. Burned: the act of being the object of an attack with incendiary elements by agents of the state (e.g. to bring a detained person close to a burning barricade, causing burns on purpose).

6. Detention: the act of being retained and/or transferred by State agents from one place to another. This act is coded not to declare the legality of the illegality of the act, but to leave a record of the act.

7. Denial or obstruction of medical assistance: act in which one or more agents of the state impede, interrupt, or prevent the provision of medical assistance of the transfer of the victim to a health center.

8. Destruction of personal items: the act of destruction of objects or movable property of a personal nature, by state agents.

9. Follow-up: the act of being observed, investigated, and persecuted to their homes by state agents generally dressed in civilian clothes, with unknown objectives.

10. Gassing: the act of being sprayed directly or indirectly by pepper spray and/or other chemical agents such as tear gas.

11. Hit by car: the fact of being run over by vehicles operated by law enforcement officers, either on a roadway intended for vehicular traffic or in a pedestrian traffic area.

12. Home invasion: illegal or unauthorized entry to the victim's home.

13. Irregular interrogation: the act of being questioned by state agents, in a place not determined for these purposes, and without the presence of a defense attorney (e.g. in a police car, or jail cell).

14. Shooting: the act of receiving projectiles thrown directly at the body of the demonstrators.

15. Stigmatization: the act of being the object of disparagement or belittlement by an agent of the state.

16. Stone throw: the act of receiving projectiles from stones thrown directly at the body, by agents of the state.

17. Stripping: the act of being forced by state agents to take off one's clothes, totally or partially.

18. Threat, death threat, rape threat: the act of being the object of announcements of possible physical or psychological acts of violence, possible assassination or forced disappearance, or announcements of possible sexual crimes by agents of the state.

19. Touching: the act of being subjected to forced palpation by state agents in the genital area, or other areas of sexual connotation.

20. Unauthorized entering: the irruption of agents of the state into public and/or private institutions without following protocols of previous authorization, such as schools, universities, unions, or workplaces.

21. Water impact: the act of directly receiving water thrown by the water cannons operated by state agents.

22. Wetting with chemicals: the act of spraying the victims with water mixed with chemical elements that cause burns or other injuries.

Additional acts were included in the report as a type, but they were not in the database, such as rape or introduction of objects, robbery, electrical shock, and placement of tear gas bombs on clothes.

A.2 Recodification of Repressive Acts

From the 22 original repressive types, water impact and wetting with chemicals were merged into the same category (water impact), along with home invasion and unauthorized entering. This leaves a total of 19 categories. I ended up using only the first five categories, but the use of tear gas (gassed) and water cannon (water impact) merged into the same category of crowd control techniques.

Table A.1: Distribution of Repressive Actions

Repression Type	Frequency	%
Shooting	1,191	48.85
Beating	750	30.76
Detention	258	10.58
Gassed	74	3.04
Hit by a car	30	1.23
Water impact	29	1.19
Threats	19	0.78
Unauthorized entry	10	0.41
Asphyxia	6	0.25
Stripping	2	0.08
Obstruction medical assistance	4	0.16
Stone throwing	3	0.12
Touching	2	0.08
Stigmatization	3	0.12
Destruction personal items	1	0.04
Follow up	2	0.08
Attack with Animals	1	0.04
Burned	1	0.04

Note: Percentages based on total N = 2,438 observations.

B   Models

B.1   Full Models

Table B.1: Zero-Inflated Negative Binomial Models of Daily Protest Events

	1-day lag	1-day lag + controls	3-day accumulated	7-day accumulated
Shootings (t-1)	0.179*** (0.027)	0.039* (0.022)		
Beatings (t-1)	0.190*** (0.023)	0.053** (0.023)		
Arrests (t-1)	0.094** (0.039)	0.039 (0.024)		
Crowd Control (t-1)	0.122** (0.055)	0.029 (0.037)		
Protests (t-1)	0.256*** (0.019)	0.247*** (0.018)		
Police per 100k (t-1)		0.109*** (0.029)		
Rain (t-1)		−0.028 (0.072)		
Hot Day (t-1)		−0.504*** (0.082)		
Weekday		0.532*** (0.066)		
Distance to Capital		0.034 (0.134)	0.026 (0.140)	0.030 (0.152)
Shootings (3-day)			0.047* (0.028)	
Beatings (3-day)			0.049* (0.030)	
Arrests (3-day)			0.038 (0.030)	
Crowd Control (3-day)			0.064 (0.040)	
Protests (3-day)			0.269*** (0.024)	
Police per 100k (3-day)			−0.048 (0.030)	
Rain Days (3-day)			0.007 (0.039)	
Hot Days (3-day)			−0.262*** (0.040)	
Shootings (7-day)				0.022 (0.035)
Beatings (7-day)				0.010 (0.036)
Arrests (7-day)				0.085** (0.033)
Crowd Control (7-day)				0.106** (0.044)
Protests (7-day)				0.292*** (0.030)
Police per 100k (7-day)				0.046 (0.033)
Rain Days (7-day)				−0.018 (0.026)
Hot Days (7-day)				−0.064*** (0.025)
Num.Obs.	25 604	22 422	21 816	20 604
R2	0.010			
R2 Adj.	0.010			
R2 Marg.		0.030	0.028	0.014
R2 Cond.		0.602	0.613	0.631
AIC	15 567.7	10 603.7	9746.7	8370.7
BIC	15 633.0	10 715.9	9850.6	8473.8
ICC		0.6	0.6	0.6
RMSE	0.77	0.65	0.63	0.60

Note: Model 1 is the simplified model without control variables. Subsequent models include police deployment per 100,000 inhabitants, rain, temperature above 30 degrees Celsius, a binary variable that indicates a weekday or weekend, and distance of the municipality to the regional capital. All continuous variables are standardized (mean = 0, SD = 1). Weather variables and weekday category remain in their original units. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Standard errors in parentheses

B.2 Alternative Model Specifications

Table B.2 presents alternative model specifications that exclude lagged dependent variables to assess whether findings are robust to different approaches to temporal dynamics in count data. These specifications focus solely on how repressive actions influence subsequent protest activity without conditioning on previous protest levels.

Table B.2: Zero-Inflated Negative Binomial Models of Daily Protest Events without LDV

	1-day lag + controls	3-day accumulated	7-day accumulated
Shootings (t-1)	0.095*** (0.022)		
Beatings (t-1)	0.120*** (0.023)		
Arrests (t-1)	0.031 (0.026)		
Crowd Control (t-1)	0.029 (0.038)		
Police per 100k (t-1)	0.135*** (0.029)		
Rain (t-1)	−0.089 (0.073)		
Hot Day (t-1)	−0.540*** (0.083)		
Weekday	0.547*** (0.066)		
Distance to Capital	−0.127 (0.135)	−0.118 (0.140)	−0.047 (0.152)
Shootings (3-day)		0.125*** (0.027)	
Beatings (3-day)		0.129*** (0.028)	
Arrests (3-day)		0.055* (0.030)	
Crowd Control (3-day)		0.082** (0.040)	
Police per 100k (3-day)		−0.025 (0.030)	
Rain Days (3-day)		0.000 (0.039)	
Hot Days (3-day)		−0.276*** (0.039)	
Shootings (7-day)			0.100*** (0.034)
Beatings (7-day)			0.094*** (0.035)
Arrests (7-day)			0.108*** (0.034)
Crowd Control (7-day)			0.133*** (0.045)
Police per 100k (7-day)			0.048 (0.034)
Rain Days (7-day)			−0.022 (0.026)
Hot Days (7-day)			−0.069*** (0.024)
Num.Obs.	22 422	21 816	20 604
R2 Marg.	0.027	0.025	0.008
R2 Cond.	0.604	0.614	0.631
AIC	10 743.6	9856.5	8457.8
BIC	10 847.8	9952.4	8553.0
ICC	0.6	0.6	0.6
RMSE	0.65	0.63	0.61

Note: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Standard errors in parentheses.

C   Robustness Analyses

C.1   Comparison of INDH Reporting and Police Reporting

A key concern in studying repression is the potential for systematic measurement bias in civilian-reported data. To address this, I compare estimates using INDH civilian reports with official police ammunition records obtained through freedom of information requests (Transparency Law). While the police data is limited to the Province of Santiago, this geographic subset accounts for approximately 25% of all documented repressive actions and protest events nationwide, providing a substantial sample for comparison. Figure C.1 presents this analysis for two key tactics: rubber bullet usage and crowd control techniques (specifically, tear gas deployment).

The comparison reveals three important patterns. First, for rubber bullets, police ammunition data shows stronger negative effects than INDH reports, particularly in the 7-day window, where the standardized effect size is approximately -0.25 (compared to -0.15 in INDH data). This difference suggests that civilian reports may underestimate the deterrent capacity of rubber bullets, possibly because some incidents go unreported or because the psychological impact of witnessing ammunition deployment extends beyond those who file formal complaints.

Second, both data sources confirm the mobilizing effect of crowd control techniques, though with notable differences in magnitude. Police records of tear gas usage show more precise and pronounced positive effects (0.2-0.3 SD) compared to INDH reports (0.1-0.2 SD), particularly in the 1-day and 7-day windows. The stronger effects in police data likely reflect more comprehensive documentation of tear gas deployment, as official records capture all instances of usage rather than only those resulting in civilian complaints.

Third, the temporal patterns differ between data sources. For rubber bullets, the divergence between INDH and police data grows larger over time, suggesting that longer-term deterrent effects may be particularly susceptible to underreporting in civilian data. In contrast, the estimates for crowd control techniques show more consistent differences

across time windows, indicating that reporting bias for these tactics remains relatively stable.

Figure C.1: Comparison of Effects on Protest Occurrence using INDH data versus *Carabineros* data
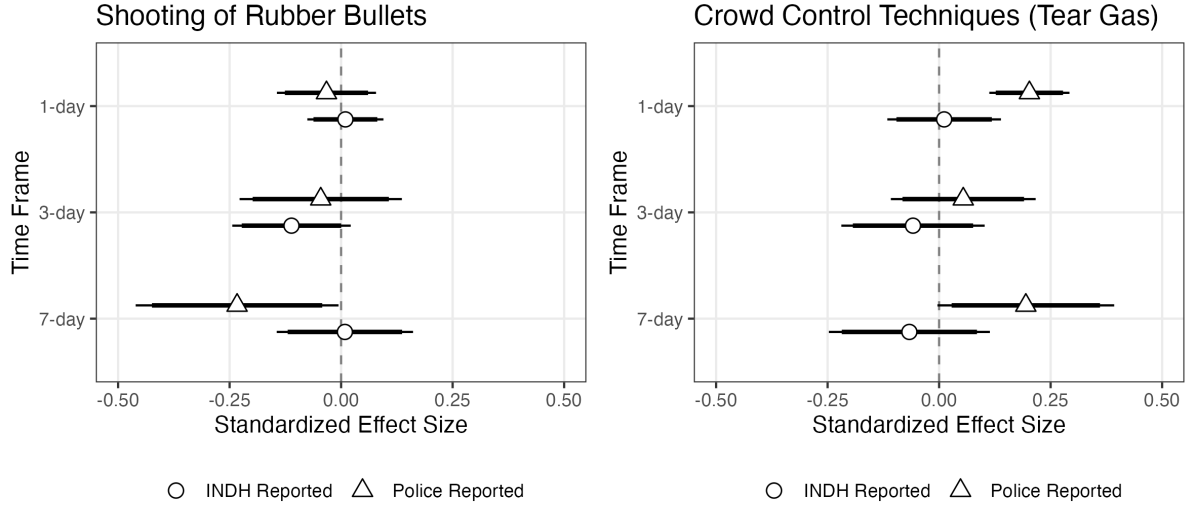
Note: Thick lines represent 90% C.Is, while thin lines represent 95% C.Is. The figure compares effects using INDH-reported incidents versus police ammunition records. Police data includes rubber bullet cartridges (15 rubber posts per cartridge) and tear gas canisters (37/38mm caliber, 3 projectiles per cartridge). Data obtained from Carabineros in April 2024.

These systematic differences between civilian and police data sources have important implications for understanding repression's effects. While both sources support the main findings about the differential impacts of various tactics, the generally stronger effects in police data suggest that civilian reports may provide conservative estimates of repression's influence on protest dynamics. This underestimation could occur through multiple mechanisms, including non-reporting of less severe incidents, difficulty in documenting widespread tactics like tear gas, or selection effects in who chooses to file formal complaints. However, the consistency in directional effects across data sources—even when focusing only on Santiago Province—reinforces the robustness of the core conclusions about how different forms of repression shape protest behavior.

The analysis also highlights the value of triangulating between different data sources when studying repression. While civilian reports provide crucial information

about experienced harm and rights violations, official police records can help capture the full scope of tactical deployment and its effects on protest dynamics. The fact that these patterns emerge clearly even in data limited to Santiago Province, where protest and repression were particularly concentrated, suggests that the relationships identified in the main analysis are not artifacts of measurement choices or geographic variation. Future research might further explore how these different measurement approaches complement each other in understanding the complex relationship between state repression and collective action.

C.2 Media effects

Table C.1: Effect of Media Reports of Violence Against Civilians on Protest Occurrence

	1-day lag	3-day accumulated	7-day accumulated
Violence (t-1)	−0.125 (0.166)		
Violence (3-day)		0.099 (0.111)	
Violence (7-day)			0.172** (0.088)
Protests (t-1)	0.271*** (0.017)		
Protests (3-day)		0.308*** (0.021)	
Protests (7-day)			0.325*** (0.026)
Police per 100k (t-1)	0.124*** (0.029)		
Police per 100k (3-day)		−0.031 (0.030)	
Police per 100k (7-day)			0.074** (0.033)
Rain Days (t-1)	−0.015 (0.073)		
Rain Days (3-day)		0.012 (0.040)	
Rain Days (7-day)			−0.015 (0.026)
Hot Days (t-1)	−0.538*** (0.083)		
Hot Days (3-day)		−0.276*** (0.040)	
Hot Days (7-day)			−0.069*** (0.025)
Weekday	0.547*** (0.066)		
Distance Regional Capital	0.035 (0.135)	0.029 (0.141)	0.034 (0.152)
Num.Obs.	22 422	21 816	20 604
R2 Marg.	0.053	0.050	0.026
AIC	10 613.3	9755.4	8377.2
BIC	10 701.5	9835.3	8456.6
RMSE	0.64	0.62	0.60

Note: All continuous variables are standardized (mean = 0, SD = 1). Weather variables and weekday category remain in their original units. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Standard errors in parentheses.

C.3 The role of political opportunities and movement resources

I estimated four models that systematically incorporate movement resources and political opportunities:

Model 1 (Opportunities): This baseline model includes only political opportunities, measured as the percentage of votes received by President Piñera in the last presidential election before the 2019 protest cycle (*Pro-Gov. Vote Share*). This variable captures the

support for the incumbent government in each municipality, serving as a proxy for the local political climate.

Model 2 (Resources):   This model includes three measures of associational resources at the municipal level:

- *Strike Count*: The number of labor strikes, capturing labor movement strength
- *Universities*: The count of tertiary educational institutions, representing potential mobilization infrastructure
- *Opposition Council Share*: The proportion of municipal council members from opposition parties, indicating local political networks

Model 3 (Opportunities + Interactions):   This model includes all previous variables plus interaction terms between each repressive tactic and the political opportunity variable. These interactions test whether repression's effect varies based on historical government support levels.

Model 4 (Resources + Interactions):   This model includes all previous variables plus interaction terms between each repressive tactic and all three resource measures. These interactions examine whether the effectiveness of repression depends on the presence of local organizational capacity and political networks.

All models maintain the same control variables as the main analysis, including past protests, police deployment, weather conditions, day of the week, and distance to the regional capital.

Table C.2: Repression Effects with Political Opportunities and Movement Resources

	Opportunities	Resources	Opportunities (Inter.)	Resources (Inter.)
Shootings (t-1)	0.039* (0.022)	0.038* (0.022)	0.291 (0.192)	−0.087 (0.093)
Beatings (t-1)	0.053** (0.023)	0.052** (0.023)	−0.276* (0.155)	0.237*** (0.074)
Arrests (t-1)	0.039 (0.024)	0.039 (0.024)	−0.060 (0.235)	0.003 (0.118)
Crowd Control (t-1)	0.029 (0.037)	0.029 (0.036)	−0.778* (0.419)	0.632** (0.266)
Protests (t-1)	0.247*** (0.018)	0.250*** (0.018)	0.249*** (0.018)	0.256*** (0.018)
Police per 100k (t-1)	0.109*** (0.029)	0.110*** (0.029)	0.112*** (0.029)	0.126*** (0.029)
Strike Count		0.278*** (0.033)	0.274*** (0.033)	0.275*** (0.033)
Universities		−0.003 (0.007)	−0.003 (0.007)	−0.003 (0.007)
Opposition Council Share		0.161 (0.529)	−0.078 (0.574)	−0.090 (0.571)
Pro-Gov. Vote Share	−0.030** (0.014)		−0.013 (0.011)	−0.013 (0.011)
Rain	−0.026 (0.072)	−0.033 (0.072)	−0.021 (0.072)	−0.041 (0.072)
Hot Day	−0.504*** (0.082)	−0.476*** (0.081)	−0.481*** (0.081)	−0.498*** (0.082)
Weekday	0.533*** (0.066)	0.532*** (0.066)	0.531*** (0.065)	0.542*** (0.066)
Distance to Regional Capital	−0.107 (0.134)	−0.139 (0.099)	−0.132 (0.099)	−0.131 (0.099)
Shootings × Strike Count				0.001 (0.004)
Beatings × Strike Count				−0.012*** (0.004)
Arrests × Strike Count				0.006 (0.004)
Crowd Control × Strike Count				0.010 (0.008)
Shootings × Universities				0.000 (0.001)
Beatings × Universities				0.000 (0.001)
Arrests × Universities				0.000 (0.001)
Crowd Control × Universities				−0.001 (0.001)
Shootings × Opp. Share				0.222 (0.146)
Beatings × Opp. Share				−0.136 (0.124)
Arrests × Opp. Share				−0.036 (0.186)
Crowd Control × Opp. Share				−1.376** (0.640)
Shootings × Gov. Vote			−0.005 (0.004)	
Beatings × Gov. Vote			0.006** (0.003)	
Arrests × Gov. Vote			0.002 (0.004)	
Crowd Control × Gov. Vote			0.015** (0.007)	
Num.Obs.	22 422	22 422	22 422	22 422
R2 Marg.	0.043	0.212	0.215	0.220
AIC	10 600.2	10 488.6	10 488.5	10 471.5
BIC	10 720.5	10 624.9	10 664.8	10 712.0
RMSE	0.65	0.65	0.64	0.64

Note: All continuous variables are standardized (mean = 0, SD = 1). * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Standard errors in parentheses.

These analyses demonstrate that the relationships between repressive tactics and protest mobilization remain significant even when accounting for political opportunities and movement resources. While these factors influence protest dynamics, they do not fundamentally alter the directional effects of different repressive tactics identified in the main analysis. The interaction terms do reveal important conditional relationships,

suggesting that the effectiveness of repression varies across political contexts and levels of organizational capacity. However, these conditional effects complement rather than contradict the main findings about how severity and selectivity of repression shape protest responses.

D CEP Survey

The CEP National Public Opinion Survey is an academic analysis of the political, economic, and social attitudes and perceptions of the population that has been conducted periodically since 1987. The survey seeks to understand the concerns, preferences, and needs of the population and to reflect the continuities and changes experienced by Chilean society. The survey targeted individuals aged 18 and older across the entire country, both in urban and rural settings, excluding Easter Island. This exclusion was based on demographic data from the 2017 Census, ensuring comprehensive representation while omitting Easter Island due to its unique demographic characteristics.

In executing this survey, a total of 1,496 respondents were interviewed in their homes. These interviews spanned 117 municipalities, reflecting a wide geographical distribution and encompassing various demographic segments. The sampling strategy was rigorous and methodical, utilizing a stratified, random, and probabilistic approach across three distinct stages: block, household, and respondent. This meticulous methodology ensured that no replacements were necessary, achieving a notable response rate of 71% with the original subjects, underscoring the survey's effectiveness in engaging participants.

Regarding the survey's precision, the sampling error was estimated at ±3%, considering the maximum variance and a confidence level of 95%. This indicates a high level of reliability and accuracy in the survey results, providing a solid foundation for further analysis and interpretation.

The data collection process was conducted through individual face-to-face interviews, leveraging a structured questionnaire to guide the conversation. This approach facilitated a consistent and reliable gathering of information, allowing for a detailed exploration of the survey topics. The fieldwork for this survey took place between November 28, 2019, and January 6, 2020, a period strategically chosen to maximize participation and ensure the relevance of the data collected.[16]

D.1 Individual Mechanism: Protest Justification and Perceptions of Human Rights Violations

To explore individual-level mechanisms behind the backlash and deterrent effects of police repression, I use data from the National Public Opinion Study conducted by CEP (2020). This survey includes two key questions that capture respondents' attitudes towards protest as a legitimate form of dissent and their perceptions of state conduct regarding human rights violations. I leverage the timing of the survey's last measurement in 2019, which coincided with the protests and included ad-hoc questions about the sociopolitical crisis's impact on public opinion. Unlike Carrasco and Pavlic (2023), who examine the effect of protest participation on perceptions of human rights violations, I focus on respondents' proximity to repressive incidents. By combining this individual-level data with local-level data on repressive events in the municipalities where respondents live, I aim to understand the mechanisms behind the deterrent and backlash effects of different repressive activities.

To explore individual-level mechanisms about the backlash and the deterrent effect of police repression, I use two different questions in the survey that capture, to some extent, respondents' attitudes towards protest as a legitimate form of dissent and their perceptions of state conduct regarding human rights violations.

1. I would like to ask you about actions people take to protest against something they feel is unfair. How often would you justify or not justify the following actions? Participating in a march as a form of protest (Always, almost always, sometimes, almost never, never).

2. How often do you think Carabineros violated human rights during the crisis that began in October 2019? (Very frequently, Frequently, Sometimes, Almost never, Never).

Below I show the effect of police repression tactics deployed at the municipal level on two dependent variables. Table D.1 pertains to protest justification, which gauges

respondents' attitudes toward the legitimacy of participating in street demonstrations as a form of protest. This is measured on a spectrum from 'never justified' to 'always justified'. Table D.2 concerns perceptions of human rights violations by the police (Carabineros) since the onset of the crisis in October 2019, with responses ranging from 'never' to 'very frequently'. The use of individual-level public opinion data enables an exploration of protest behavior and attitudes, offering a granular perspective on how repression is experienced and interpreted by individuals within affected communities. These measures serve as indicators of the emotional and rational mechanisms that potentially drive the backlash or deterrent effects at the municipal level, offering a detailed look at how repression is personally experienced and interpreted.

The main results of the paper highlight that targeted repression techniques, such as beatings and arrests, have an immediate backlash effect, whereas crowd control techniques only exhibit a backlash effect after seven days. Conversely, highly costly and widespread techniques, such as rubber bullets, show a deterrent effect. When contrasting the individual-level data, we see that arrests on the day before the survey increased respondents' justification for protests but reduced their perception of human rights abuses by the police. This may suggest that respondents differentiate between the necessity of maintaining order and the violation of rights. On the other hand, the shooting of rubber bullets also negatively affects the perception of human rights abuses, which could be explained by the same mechanism; however, that effect disappears when the three-day accumulation is considered. Interestingly, crowd control techniques appear to increase both protest justification and the perception of human rights abuses. The public's increasing concern about human rights, especially in response to crowd control measures, aligns with the hypothesized backlash effect, where sustained exposure to such repression reinforces the public's resolve and awareness, possibly leading to continuous mobilization.

Table D.1: Models for Protest Justification

	1-day lag	3-day accumulated	7-day accumulated
Shootings (t-1)	−0.603 (0.804)		
Beatings (t-1)	−0.027 (0.108)		
Arrests (t-1)	0.206*** (0.023)		
Crowd Control (t-1)	1.056*** (0.111)		
Police per 100k (t-1)	−0.149 (0.111)		
Shootings (3-day)		0.438 (0.610)	
Beatings (3-day)		−0.086 (0.146)	
Arrests (3-day)		0.152 (0.246)	
Crowd Control (3-day)		1.124*** (0.104)	
Police per 100k (3-day)		−0.021 (0.118)	
Shootings (7-day)			0.639*** (0.204)
Beatings (7-day)			−0.098 (0.115)
Arrests (7-day)			0.330* (0.195)
Crowd Control (7-day)			0.673*** (0.242)
Police per 100k (7-day)			0.110 (0.143)
Education Level (Linear)	0.626*** (0.143)	0.616*** (0.140)	0.622*** (0.140)
Female	−0.153 (0.095)	−0.138 (0.095)	−0.148 (0.098)
Age	0.014*** (0.003)	0.014*** (0.003)	0.014*** (0.003)
Num.Obs.	1094	1094	1094
R2	0.313	0.312	0.316
R2 Adj.	0.229	0.228	0.232
R2 Within	0.097	0.095	0.100
R2 Within Adj.	0.087	0.086	0.090
AIC	4066.4	4067.9	4062.8
BIC	4666.1	4667.7	4662.5
RMSE	1.39	1.39	1.39
Std.Errors	Municipality	by: Municipality	Municipality
FE Municipality	✓	✓	✓

Note: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Standard errors in parentheses

Table D.2: Models for Human Rights Violations

	1-day lag	3-day accumulated	7-day accumulated
Shootings (t-1)	−0.090 (0.318)		
Beatings (t-1)	0.036** (0.016)		
Arrests (t-1)	−0.043* (0.026)		
Crowd Control (t-1)	−0.407*** (0.064)		
Police per 100k (t-1)	−0.065 (0.050)		
Shootings (3-day)		0.086 (0.221)	
Beatings (3-day)		0.002 (0.046)	
Arrests (3-day)		0.021 (0.096)	
Crowd Control (3-day)		0.333** (0.138)	
Police per 100k (3-day)		−0.082 (0.051)	
Shootings (7-day)			−0.080 (0.112)
Beatings (7-day)			0.096* (0.056)
Arrests (7-day)			0.029 (0.057)
Crowd Control (7-day)			0.897*** (0.108)
Police per 100k (7-day)			−0.126 (0.082)
Education Level (Linear)	0.089 (0.087)	0.084 (0.086)	0.085 (0.086)
Female	0.088 (0.059)	0.094 (0.058)	0.100* (0.059)
Age	0.005** (0.002)	0.005** (0.002)	0.004** (0.002)
Num.Obs.	1057	1057	1057
R2	0.496	0.496	0.499
R2 Adj.	0.430	0.431	0.434
R2 Within	0.395	0.396	0.399
R2 Within Adj.	0.388	0.389	0.392
AIC	2725.4	2724.8	2719.1
BIC	3330.9	3330.3	3324.6
RMSE	0.78	0.78	0.78
Std.Errors	Municipality	Municipality	Municipality
FE Municipality	✓	✓	✓

Note: * p < 0.1, ** p < 0.05, *** p < 0.01. Standard errors in parentheses

E   Additional Information
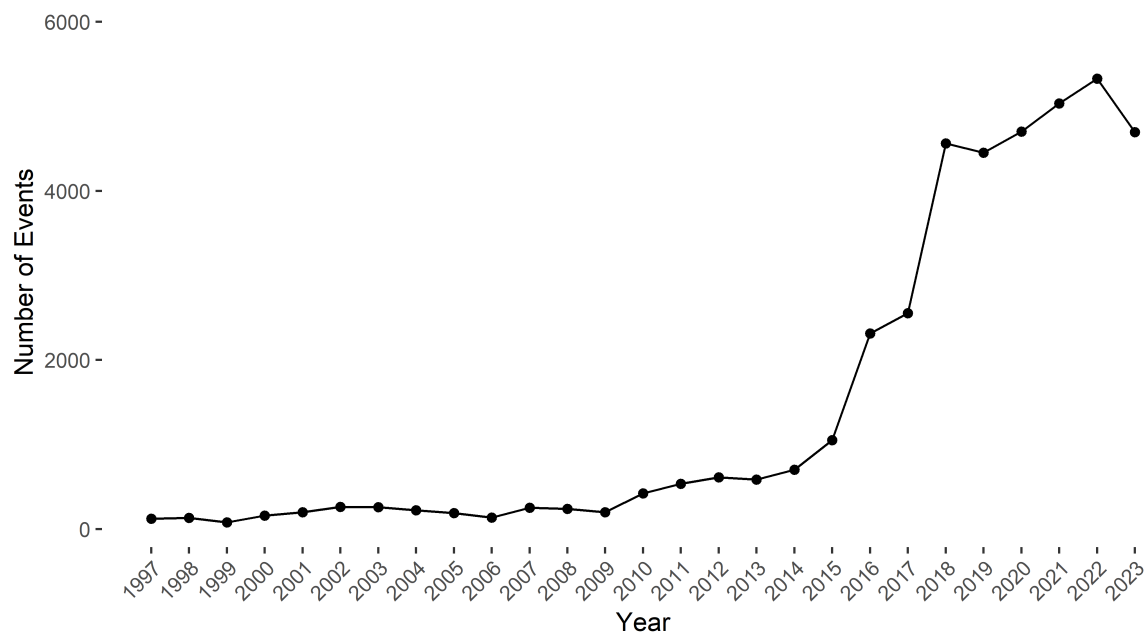
E.1   Mass Mobilization Data

Figure E.1: Trends in Mass Mobilization per Year
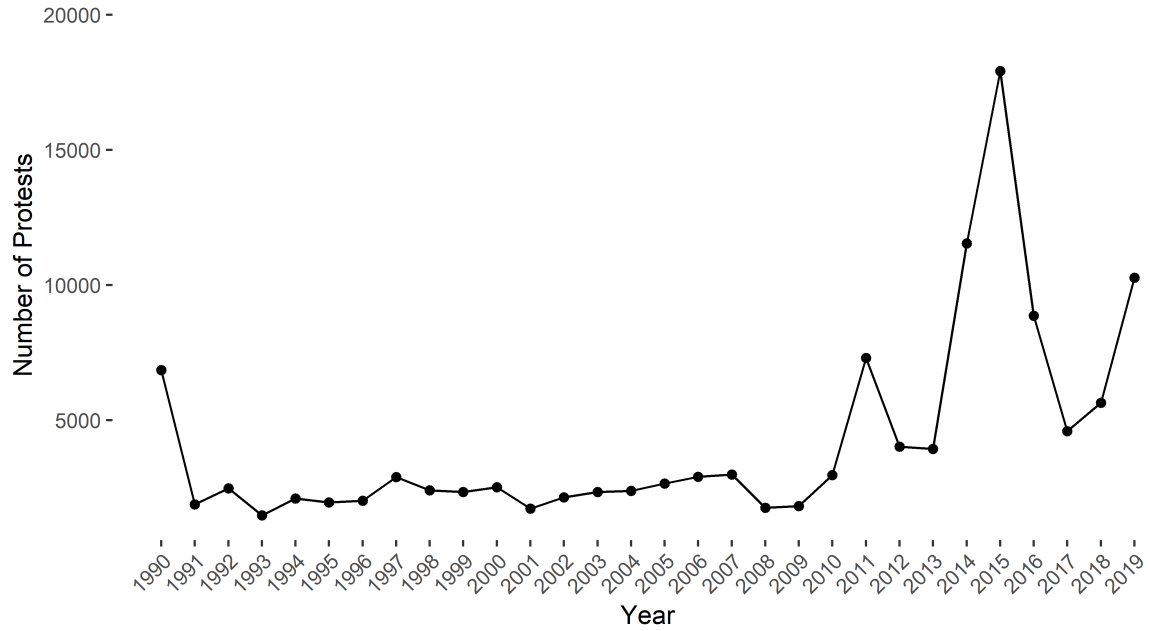
Source: Mass Mobilization Data (Clark & Regan, 2016).
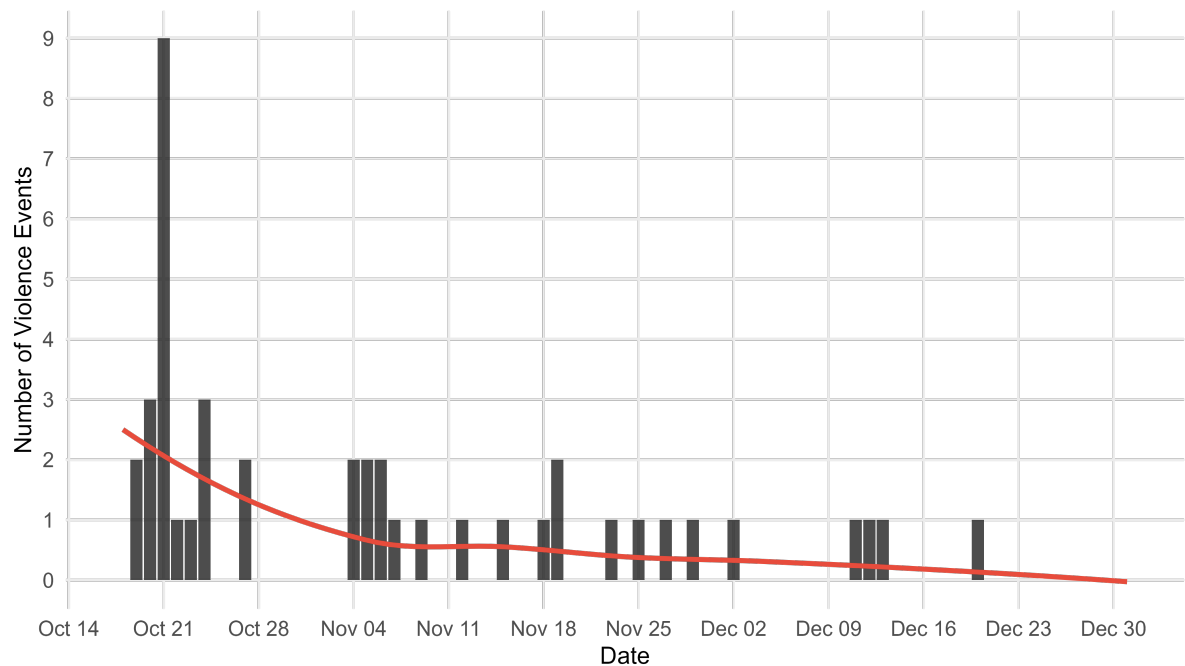
E.2 Violence Against Civilians

Figure E.2: Trends in Violence Against Civilians Perpetrated by State Forces

Source: ACLED (Raleigh et al., 2023).

E.2.1 Violence Against Civilians During the Chilean *Estallido*

Figure E.3: Violence Against Civilians in the Context of Protest Events

Source: ACLED (Raleigh et al., 2023).

E.3 Mobilizations in Chile

This data was provided by the national Chilean police, Carabineros, as a response of a request made via Transparency Law.

Table E.1: Registration of Demonstrations

	2019			Total Nationwide
	October	**November**	**December**	
Total Per Month	392	1228	910	2530

Table E.2: Registration Attendees

Regiones	2019			Total
	October	**November**	**December**	
Arica y Parinacota	23,847	19,209	3,412	46,468
Tarapacá	26,218	57,882	5,906	90,006
Antofagasta	76,487	63,358	12,265	152,110
Atacama	23,820	34,885	4,262	62,967
Coquimbo	72,269	78,682	6,121	157,072
Valparaíso	124,340	107,465	14,941	246,746
Metropolitana	2,106,645	547,838	116,161	2,770,644
Lib. Bdo. O'Higgins	59,047	52,665	5,979	117,691
Maule	119,021	89,251	10,981	219,253
Ñuble	101,162	28,362	1,135	130,659
Bio Bío	183,230	120,513	23,223	326,966
Araucanía	70,202	71,686	5,226	147,114
Los Ríos	107,165	59,683	6,410	173,258
Los Lagos	89,505	100,221	9,975	199,701
Aysén	12,285	23,712	1,105	37,102
Magallanes	33,698	27,005	2,830	63,533
Total	3,228,941	1,482,417	229,932	4,941,290

E.4 Arrest Data

A potential concern arises regarding the classification of arrests as a low-cost tool of repression. To empirically assess the costs imposed by arrests on protesters during the

2019 Chilean protests, I analyzed data obtained from the Public Defender's Office of Chile. This dataset includes all arrests made during the protest period, specifying the offenses charged and the subsequent legal outcomes.

The analysis focuses on arrests related to protest activities. These were identified based on specific offenses commonly associated with demonstrations, such as public disorder, threats to police officers, throwing objects, and looting.

- Article 268 septies, Penal Code: Unauthorized complete interruption of free circulation of persons or vehicles in public spaces through violence, intimidation, or obstacles.

- Article 269, Penal Code: Severe disturbance of public tranquility to cause injury or other harm.

- Article 3 in relation to Article 14, Law 17.798: Unauthorized possession of explosive or incendiary devices.

- Article 449 quater (Looting): Theft under circumstances contributing to the removal or destruction of most or all contents of a commercial or industrial establishment.

Between October and December 2019, a total of 6,380 protest-related arrests were made. Analysis of the legal outcomes indicates that only 156 cases resulted in an arrest warrant, representing approximately 2.4% of all protest-related arrests. The vast majority of individuals were released without formal charges or faced minor legal consequences. These findings suggest that, in the context of the 2019 Chilean protests, arrests functioned primarily as temporary detentions with minimal long-term legal repercussions. The low prosecution rate implies that the arrests did not impose substantial legal or financial burdens on the majority of protesters. Consequently, while arrests do involve immediate costs such as temporary loss of freedom and potential intimidation, they did not equate to high-cost repression in this context.

This empirical evidence supports the classification of arrests as a low-cost, targeted repressive technique within the backlash-deterrence continuum. The limited long-term impact of these arrests may have also contributed to sustained or increased protest

activity, as the immediate costs were not sufficient to deter participation.

Figure E.4: Distribution of arrests and whether arrest warrants were issued
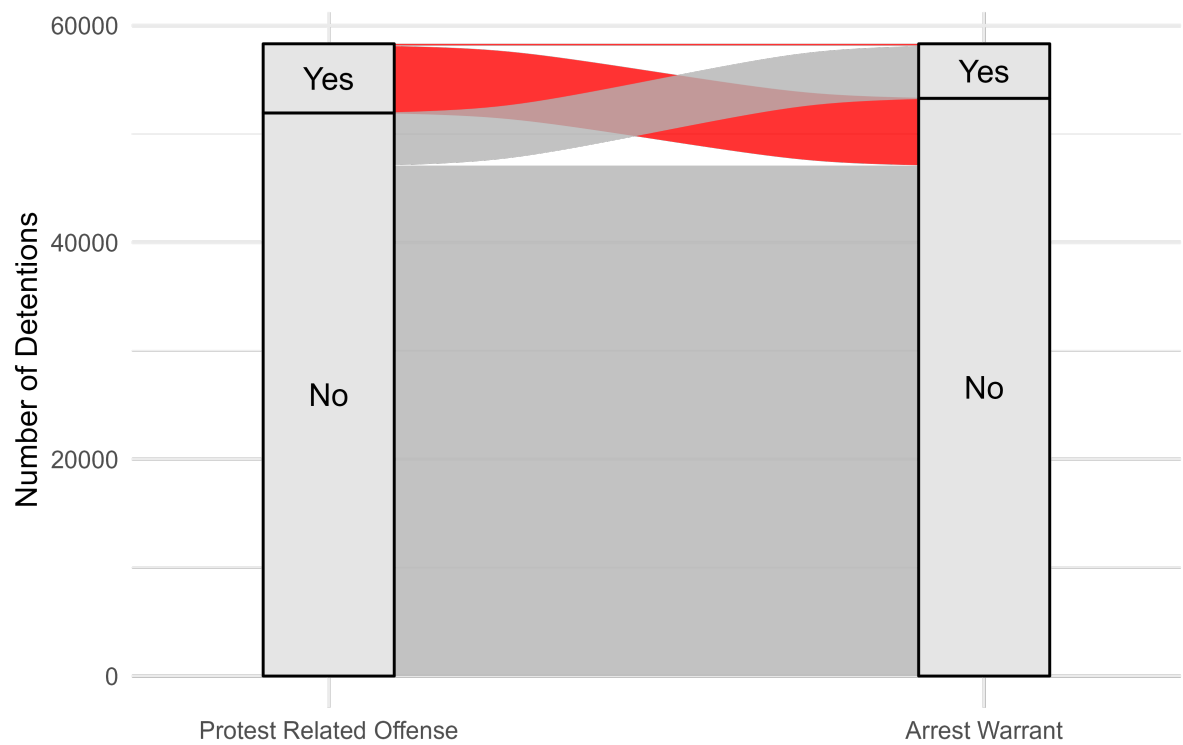
Note: Elaborated based on Public Defender's Office data.

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