The Backlash Effect of State Coercion:

Protest Resilience Under Costly and Targeted Repression

Francisca Castro

Humboldt-Universität zu Berlin

February, 2024

Word Count: 10,434

Abstract

The relationship between state repression and protest mobilization presents a complex puzzle. Repression can sometimes deter street protests, yet in other instances, it paradoxically intensifies them. Focusing on Chile, this study analyzes the variable effects of repression tactics. Short-term data show arrests and beatings often increase protests, while rubber bullets exhibit a deterrent effect. The findings are contextualized within a theoretical framework that emphasizes the interplay between the costs associated with repression and their degree of targeting. This approach sheds light on the mechanisms behind the backfiring of repression and questions its efficacy in curbing dissent, particularly in democratic settings.

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

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], with a notable upsurge in both established and emerging democracies. This trend reflects growing global discontent with political, economic, and social issues, manifesting itself in diverse forms of public demonstrations. Although protests are a fundamental political right in democratic societies, in many cases, demonstrators are severely repressed by state authorities. The use of coercion and brutality by law enforcement officials against protesters has intensified, even in the most consolidated democracies.[2] This escalation, in some cases reaching the point of systematic civil and human rights violations during street protests, can have divergent effects: it may either discourage and diminish protest activity or provoke a backlash, potentially increasing mobilization and escalating the protesters' tactics towards violence (Rasler, 1996; Sullivan et al., 2012).

Despite the array of connections between repression and dissent, it is still unclear if specific forms or tactics of repression have particular effects on mobilization, and if this diversity of interactions between state coercion and protest can be explained by the type of coercive strategy that is being used—what some authors have called the *repertoire* of repression (Gutiérrez-Sanín and Wood, 2017)—. The analysis of concrete repressive actions of law enforcement officials based on typologies was identified as a key topic for social movements research more than a decade ago (Davenport, 2007). Remarkable research in this area has emerged over the last few years (e.g. García-Ponce and Pasquale, 2015; Curtice and Behlendorf, 2021; Bautista et al., 2020), nevertheless, empirical studies have not yet captured the diversity in the types of repression carried out during contemporary protests in democratic contexts, and whether they have different effects on the occurrence of protests. It is important to

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

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

inspect not only which forms of repression deter protest but also the ones that increase it, especially considering that when attacks on demonstrators backfire, the political regime might be severely damaged (Smithey and Kurtz, 2018). In such cases, the government in power may even be unable to overcome the crisis of legitimacy caused by repression when it is considered inappropriate or unjust.

Assessing the effect of different forms of repressive actions is challenging for multiple reasons. Firstly, when measuring state repression, most sources only consider broad categories based on dichotomous classifications, such as police presence/no presence, or lethal versus non-lethal.[3] Secondly, it is difficult to have a temporal breakdown of repressive events and get to know precisely *when* each form of repressive action takes place. This hinders researchers from identifying potential relationships between forms of repression and the dynamics of protest mobilization. Since the literature has found different directions on the effect of repression on protests, examining specific forms of repression can shed light on whether these conflicting results are explained by grouping different repressive actions. Additionally, this has prevented scholarship from developing comprehensive theories to explain why and when repression works and to understand, for instance, what types of dangers and threats inflicted by the state end up deterring protests, and which ones cause the opposite.

To test which forms of repression backfire, 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. Due to the development of protests over several months, in multiple cities across the country, and the various types of repression that were used to deter protesters, this case serves as an appropriate setting for studying the effects of state coercion on protest activity. Utilizing data from the Social Conflict Observatory (Centre for Social Conflict and Cohesion Studies, 2020), which provides detailed accounts of protest activity, along with data on repressive events obtained from the

[3]For instance, Earl, Soule, and McCarthy (2003) distinguished six forms of police repressive tactics through categories such as the use of physical force and use of weapons, without distinguishing the level of physical force being used, nor the type of weapon. In many cases, the availability of data makes these distinctions impossible to achieve.

Chilean Human Rights Institute (INDH, 2020), I delve into how different forms of repression, including the use of rubber bullets, beatings, arrests, and crowd control techniques, influence protest activity. These sources provide not only a comprehensive inventory of protest and repressive events but also a detailed account of repression types and their timing, addressing some of the traditional challenges in this area of research. By employing zero-inflated negative binomial models to handle overdispersion, and lagged variables to account for temporal dynamics, I capture the multifaceted effects of various repressive actions, elucidating the complex interplay between state repression and protest occurrence.

The findings reveal varying patterns in how different forms of repression influence protest activity. Some tactics of repression, like the use of rubber bullets, diminish protest activity in the following days, but other tactics, such as arrests or the use of crowd control techniques, possess a backlash effect, increasing subsequent protest activity. This indicates that not all forms of state repression have uniform effects on protests, providing new insights into the broader discourse on the relationship between state coercion and protest activities. I interpret these results by arguing that repressive acts possess two dimensions that can explain their potential effect on protest occurrence: their costs, linked to the capacity of inflicting bodily harm, and their level of targeting, linked to the reach of repression, specifically, whether it can be exercised towards multitudes or, on the contrary, at an individual level. While scholarship has long recognized the importance of assessing the costs (e.g. Gurr, 1970; Lichbach, 1987), and the level of targeting (e.g. Sullivan, 2016; Demirel-Pegg and Rasler, 2021) in understanding how state repression influences protest and dissent, this study uniquely applies these theoretical insights to analyze specific, concrete forms of coercion. I contend that the most widely used forms of police repression in democracies can be categorized based on these two aspects, which help us anticipate specific mobilization outcomes.

This study offers a nuanced perspective on the relationship between repression and protest mobilization, refining the conventional view that increased costs and risks invariably deter protest activity (Opp and Roehl, 1990; Digrazia, 2014). The results

underscore the importance of the accumulation of repressive actions: it is the repeated application of high-risk tactics with severe or even fatal consequences, such as police beatings or the use of rubber bullets, that gradually reduces the frequency of protests. This pattern suggests that the deterrent effect of repression emerges over time, challenging the notion that the immediate costs and risks of repression are the primary factors dissuading participation in protests. I also present new findings regarding the effects of targeted versus widespread repression. Contrary to expectations that targeted repression might be more effective in quelling dissent due to its direct impact on individuals or groups (Demirel-Pegg and Rasler, 2021; Josua and Edel, 2015; della Porta, 1997), these findings reveal that the effect of repressive tactics in diminishing dissent is not conditioned on the selectiveness of its targets. Instead, the critical determinant appears to be the cumulative exposure to repression, which can influence protest activity irrespective of whether the tactics are applied broadly or selectively. This approach integrates the costs and targeting of repression, while also considering the cumulative effect of repressive actions over time on the occurrence of protest activities.

The Effects of Repression: Expectations from the Literature

Extensive research has scrutinized the interplay between state repression and contentious activities.[4] Repression stands out as a critical element in understanding the responses and strategies of social movements (della Porta, 2012). The research puzzle that has captivated scholars is the coercion-protest paradox: the inconsistent outcomes of repression that can either suppress or inadvertently amplify protest activities (Pearlman, 2013). Earl and Soule (2010) made an enlightening critique of the prevalent simplistic view of protest policing, claiming that it fails to account for the array of strategies employed by law enforcement. Scholarship still lacks a detailed exploration of the impact of specific repressive strategies and crowd control techniques on protest dynamics. Khawaja (1993) was among the first to assess the consequences of varied repressive actions beyond just arrests, finding that most forms of repression actually increased collective action, with the exception of home raids, which decreased it.[5] This section aims to synthesize key arguments regarding the effects of repression, dividing them into two categories: scenarios where repression fails or backfires, and those where it effectively diminishes dissent.

The Backlash of Repression

When theorizing about the backlash of repression, the focus of the literature has been put mainly on the emotional responses that are triggered by repression. Excessive use of force against peaceful demonstrators may intensify grievances against governmental institutions, which can lead to collective emotional reactions that serve as rallying points for mobilization across diverse societal contexts (Schulte and Steinert, 2023), potentially

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

[5] Khawaja (1993) examined both individualized forms of repression, like tear gas, shootings, and arrests, and collective punishment, such as curfews and military checkpoints. Khawaja notes, however, that these results may be context-specific, applicable primarily in settings already primed for resistance where organizational structures can withstand persistent state repression.

leading to an escalation in the demands of the movements (Kang, 2023). But which forms of repression are more likely to generate these emotional responses?

Violent forms of repression, often linked with heightened costs, are capable of eliciting public outrage, thereby motivating individuals to adopt confrontational stances against authorities in support of collective causes (Khawaja, 1993). The connection between repression and emotional responses, notably anger, is well-documented, with scholars suggesting that such emotions can catalyze citizens' participation in protests, particularly when repressive events capture public attention (della Porta, 2013; Jasper, 2014; Hess and Martin, 2006). It has been proposed that violent repression, while potentially deterring public demonstrations in the short term, can amplify emotional responses in the long term, thereby fueling protest activities over a prolonged period. This phenomenon may result in a U-shaped relationship between the intensity of repression and the frequency of protests (Dornschneider-Elkink and Edmonds, 2024).

Understanding the mechanisms through which repression incites emotional responses and potentially generates backlash reveals shifts in cost assessment as a pivotal factor. This process, where repression backfires, is not simply a matter of decreasing costs but involves a shift in individuals' willingness to accept previously untenable costs (Pearlman, 2013). The Arab Spring serves as a salient example, wherein repression did not deter protests; rather, it sparked indignation and courage, propelling people into the streets (Pearlman, 2013). A similar dynamic was observed during the Catalan independence movement, where the backlash from repression not only failed to suppress the movement but also intensified positive attitudes towards its objectives (Balcells et al., 2021). Additionally, repression amplifies feelings of relative deprivation and a collective sense of injustice, further propelling group members towards collective action (Gurr and Moore, 1997; Van Zomeren et al., 2004). By affecting individuals' emotions and attitudes, especially in contexts where repression is perceived as unjust, mobilization processes that encourage protest action are likely to be activated (Opp and Roehl, 1990). Thus, the perception of repression, along with the

resultant emotional and attitudinal shifts, plays a critical role in determining the trajectory of social movements and collective action.

The literature has also identified the spread of repression as one key factor to explain backlash. Widespread, indiscriminate repression, conceptualized as collective targeting (Kalyvas, 2006) or collective punishment (Khawaja, 1993), frequently precipitates a substantial increase in protest mobilization, particularly when perceived as unjust by both direct participants and the wider public (Hess and Martin, 2006; Honari, 2018). Such forms of repression, owing to their high visibility, can transform passive observers into active protesters (Earl, 2003). Actions that are indiscriminate and high-profile not only incite outrage among those directly affected but also resonate with wider audiences, fostering a unified front against perceived state excesses (della Porta, 1997; Josua and Edel, 2015). The dissemination of information regarding these repressive acts is pivotal; in the absence of widespread awareness, an increase in collective action is less likely to occur (Sutton et al., 2014). On the contrary, when protests reach their maximum information-revealing potential, the likelihood of cascading into a successful uprising increases (Garfias and Magaloni, 2018).

When state repression is both apparent and perceived as an overreaction from the state, a solidarity effect emerges, bridging the gap between those directly targeted by repression and more moderate observers (Sharp, 1973). This dynamic indicates that indiscriminate repression, intended to suppress dissent, can paradoxically enhance support for movements and escalate conflict (Sullivan, 2016). Empirical evidence supports this notion, indicating that protest activity tends to increase in response to both lethal and non-lethal violence applied in a non-targeted manner (Demirel-Pegg and Rasler, 2021), highlighting the complex and often counterintuitive effects of widespread repression in social conflicts.

Does Repression Even Work?

The literature provides extensive insights into why repression can backfire, leading to increased dissent rather than quelling it. However, it is equally critical to examine

scenarios where repression effectively diminishes dissenting practices, aligning with governmental objectives to maintain control. The exploration of the repression-concession continuum offers valuable perspectives on when and how state coercion can achieve its intended outcomes (Klein et al., 2022; Shadmehr and Boleslavsky, 2022). Faced with the strategic decision between making concessions to or repressing dissidents, governments often choose the path they perceive as most cost-effective (Lachapelle, 2021). Understanding the calculus behind these decisions is essential, not just for analyzing the rationale behind regimes' reliance on repression, but also for identifying the factors that influence individuals' decisions to engage in or abstain from collective action. Subsequently, the decision to participate in protests involves a cost-benefit analysis, where mobilization becomes more likely if the perceived benefits of action outweigh the anticipated costs (Gamson, 1975; Tilly, 1978).

Given that repression can alter the cost-benefit calculus by modifying the perceived risks associated with dissent (Young, 2019), it stands to reason that more violent forms of repression might elevate the perceived danger, thereby diminishing the likelihood of protest activity. The approach of clamping down on largely peaceful dissent can serve as a significant deterrent to future activist engagement. When the costs incurred from facing repression, particularly through nonviolent tactics, significantly exceed the perceived benefits of participating in movements, it can effectively discourage continued or future mobilization (Chiang, 2021). This dynamic highlights the nuanced interplay between the nature of repression and its impact on the decision-making processes of potential protesters. However, this relationship is not always straightforward. Dornschneider-Elkink and Edmonds (2024) suggest that nonviolent forms of repression, such as imposing street blockages and curfews to prevent demonstrations, can exert a more substantial dampening effect on dissent than violent state actions, challenging the conventional belief that violent repression is the most effective deterrent. This indicates that the strategic application of repression, which tactically alters the logistical ease of protesting without escalating violence, can subtly but significantly impact mobilization decisions.

Targeted repression, as opposed to the aforementioned practice of indiscriminate

coercion, also appears as an important factor in explaining when repression is effective. Research indicates that selective repression can lead to a reduction in the rate of protest actions. This concept of targeting has been extensively studied within the context of political violence in armed conflicts, contrasting it with indiscriminate violence (Gutiérrez-Sanín and Wood, 2017). Demirel-Pegg and Rasler (2021) highlight a policing approach that includes tactics like establishing extensive no-protest zones, employing non-lethal weapons, strategic arrests, and both visible and covert surveillance of disruptive protesters. This approach is characterized by a proactive effort to identify, isolate, and manage perceived societal threats, especially among informal, leaderless groups that depend on consensus or decentralized decision-making. Such tactics aim to reduce the unpredictability of police responses to unapproved and confrontational protest methods.

The objective of targeting dissidents through selective repression is to weaken both the capacity and the willingness of individuals to participate in collective action (Kobayashi et al., 2021). When the government directs its repressive measures towards clandestine activities or fringe groups, it is more likely to impair their organizational capacity, thus diminishing the likelihood of subsequent challenges (Sullivan, 2016). Repressive actions, aimed at preventing or diminishing direct and non-institutional challenges to established power structures, often exhibit a higher degree of targeting (Earl, 2011). Della Porta (2012) underscores the significance of 'selection' in understanding varying strategies of protest policing, drawing on examples from Italy and Germany between 1950 and 1990. The distinction between 'selective' and 'diffuse' repression hinges on the range of groups targeted, with selective police targeting focusing primarily on more violent groups, as opposed to indiscriminate repression that targets the general public, including those not involved with opposition movements (Brockett, 1993). In turn, selective state violence is less likely to provoke mass rebellion (Christensen and Garfias, 2018), and more likely to cause deterrence.

A Theory of Protest Resilience Amidst Repression

The previous section synthesized various arguments explaining the backlash of repression as well as the conditions under which repression appears to be effective in diminishing dissent. Yet, these theoretical explanations require empirical grounding to determine their predictive value, especially considering that there is no consensus regarding the effects of repression, as there are previous findings in both directions. It remains a challenge to quantify the costs that would tip the balance and effectively reduce mobilization, or to empirically assess which forms of diffuse or selective repression provoke the opposite.

Building upon the literature, which views repression as a state mechanism to suppress dissent and collective action (Boykoff, 2007), this paper aims to reassess the findings of the existing literature regarding the backfiring effect of repression, namely, that when repression's costs are high, a deterrent effect will likely occur, but that nevertheless under certain circumstances, repression can backfire regardless of the costs it posits. Table 1 outlines the directions posited by the literature which is discussed below, alongside the two hypotheses I aim to test in this study to understand the interplay between the costs and targeting of repression.

Table 1: Hypotheses

		Targeting	
		Widespread	**Targeted**
Costs	**High**	Hypothesis 1	−
	Low	+	Hypothesis 2

Note: The positive sign implies a backlash effect (an increase in mobilization after repression), whereas a negative sign implies a deterrent effect (a decrease in mobilization after repression).

Costs: The concept of costs is a critical consideration in both the state's decision to deploy repression and individuals' decisions to engage in protest. While some research highlights that emotional responses to repression, such as guilt or moral outrage, might sustain or even increase mobilization (Mok, 2022), there is an argument to be made for

the inhibitory impact of high-cost repression. Violent and potentially life-threatening forms of state repression, which entail significant physical, psychological, or social costs, are likely to reduce mobilization, especially when coupled with targeted forms of repression.

Targeting: In the realm of repression, the distinction between diffuse and selective strategies is crucial (della Porta and Fillieule, 2004). The essence of targeting within repressive actions is captured by their physical application. Techniques such as crowd dispersion, which broadly affect groups, are instances of non-targeted repression. These measures are applied indiscriminately and could inadvertently increase mobilization due to the uncertainty and perceived arbitrariness they introduce (della Porta, 1997; Waddington, 1997). Such actions may inadvertently publicize abuses, galvanizing further opposition and underscoring the state's aggressive posture (Sullivan, 2016). Conversely, targeted repression would achieve the opposite.

Integrating the concepts of costs and targeting, this research categorizes the effects of repression, distinguishing between those that trigger a backlash and those that deter mobilization, as delineated in Table 1. The literature indicates that repression typically backfires when it is low-cost and widespread, leading to increased mobilization, while high-cost, targeted repression tends to decrease mobilization. The dynamics of costly, widespread repression or low-cost, targeted repression remain less examined in existing studies. This study proposes two hypotheses: widespread deployment of high-cost repression, characterized by its potential for physical harm, will lead to increased mobilization (**Hypothesis 1**); and targeted repression that is less likely to cause physical harm will result in decreased mobilization (**Hypothesis 2**). These hypotheses reflect the complex spectrum of repression, which includes both overt violence and subtler coercive measures (Heuer and Hierman, 2022), and acknowledge that governments may employ softer tactics or make concessions to avoid provoking a backlash (Aytaç et al., 2017). They also underscore the role of visibility in state coercion, as strategies that are less perceptible may be strategically utilized to minimize public outcry and mobilization (Carey, 2010).

Context: The Chilean *Estallido*

The *Estallido Social* ("social outburst") in Chile, starting in October 2019, was not merely a localized event but serves as a crucial proxy for understanding the dynamics of police repression and its repercussions across similar socio-political landscapes. Characterized by its pervasive daily manifestations and significant public engagement across localities, this protest cycle sheds light on the broader patterns of state response to collective dissent. The protracted nature of this mobilization, spanning almost six months, offers a unique lens to examine the repression-contention nexus on a temporal scale that transcends isolated incidents. In this way, the *Estallido* becomes a valuable model for exploring how various repressive strategies influence public mobilization trends, offering deeper insights into the intricate balance between state coercion and the resilience of protest movements worldwide

After the return of democracy following the 1989 Plebiscite that ended Augusto Pinochet's dictatorship, multiple social movements developed in Chile, the most emblematic ones being the student movements of 2006 and 2011. Even when the student movement achieved significant political victories, such as the repeal of the General Education Law (Ley General de Educación in Spanish, LGE), sustaining steady protest activities for almost entire academic years, neither the 2006 nor the 2011 movement had the same level of protest frequency and sustained turnout as the 2019 *Estallido*. What unfolded for almost six months was a real routine of protest activity with little to no organization. In Santiago, people gathered in Plaza Baquedano, one of the most crowded places in the city, almost every afternoon, with Fridays being the most frequented day of the week for people attending the protest. 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 Santiago 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 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. Barricades and the destruction of subway access gates occurred. During that night, multiple subway stations were set on fire.

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 the social unrest. Government support for police actions ultimately translated into more social unrest and discontent. Despite the constant pressure from the Government to "return to normality", and the announcement of an action plan called 'New Social Agenda' (*Nueva Agenda Social*) (Rogel, 2019), which, according to the Government, aimed to solve the main problems and struggles of the population, social unrest did not stop. The feeling that the Government's measures were not aimed at structural reforms, coupled with high levels of repression, ultimately generated a constant state of skepticism and anger in the society. Protests and riots lasted until the COVID-19 outbreak in mid-March 2020.

According to data provided by Carabineros, almost five million people took part in the protests between October and December 2019.[6] This high turnout did not prevent demonstrators from being physically 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 for the democratic history of the country. International

[6]This data was provided as a response to a request through 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 geographic function application that divides the territory into polygons based on the density of the attendees and the area in square meters.

organizations such as Human Rights Watch and Amnesty International acted as observers of what was happening on the streets, and continuously called out the disproportionate use of force against protesters and persistent non-compliance with protocols that resulted in thousands of people with eye injuries caused by rubber bullets (Amnesty International, 2020). The severity of the accusations against Carabineros and their practices caused considerable outrage in the population. Abuses were not limited to what happened on the streets while protesting but also occurred in other places. The media informed about several cases of undressing in police stations (INDH, 2019), along with other occurrences of gender-based violence such as rape threats (Rojas, 2019). Given that the frequency and participation levels of protests remained relatively stable over the next few months, despite the variety and intensity of repressive actions committed by Carabineros and other law enforcement institutions, it is worth examining the effect of these repressive actions and whether they were linked with an increase in protest activity.

Research Design

Variables and Measurement

I use data on protest occurrence collected by the Social Conflict Observatory (Centre for Social Conflict and Cohesion Studies, 2020), a research initiative that systematically identifies conflicts in Chile via detailed press analysis. This measurement considers contentious action as the primary unit of study, understood 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, particularly focusing on those that affect local communities. I included all events classified as contentious activities during the period from October 18 to December 31 of 2019[7], with documentation of the specific location (municipality) and date of occurrence.

I supplemented this protest occurrence information with data on repressive actions by law enforcement officials 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, they were a key actor in documenting and communicating 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 elaborated based on civil lawsuits decreases the risk of reporting bias since it is not at the discretion of the administrative entity which cases to record and which not to.[8] The database included 22 types of repressive actions,

[7]For this measurement, the Social Conflict Observatory only included protests until 2019. This posits a temporal limitation since in actuality there were protests until March, when they started to curve down because of the pandemic. Nevertheless, the largest number of protests occurred between October-December, explained by the fact that in the summer months (January-February), students are not as active as during the school period.

[8]Under-reporting is still possible, considering that not all those who were victims of police abuse decide to report and file a complaint. However, there is a certainty that the events comprised in this database did effectively occur at the time and the place that was reported.

of which I considered only the five with the highest occurrence[9], accounting for over 85% of the total repressive events (see Table A.1). For each of these actions, I measured the total number of repressive events for every category, by municipality, at a specific date. Details about the full set of categories and their distribution are available in Appendix A.

Combining these two sources of information, I constructed a time-series database comprising a total of 346 municipalities for each of the 74 days, getting a final data set of 25,604 observations. Table 2 summarizes the distribution of repressive actions and contentious events by region, month, type of repressive action, and type of contentious event for those locations that have at least one protest or repressive event.

Table 2: Distribution of repressive actions and contentious events

	Repressive actions	**Protest events**
Region		
Metropolitan Region	34.27 (790)	22.39 (743)
Other Regions	65.72 (1,515)	77.60 (2,575)
Type of Repressive Action		
Arrests	11.19 (258)	
Beatings	32.53 (750)	
Crowd Control (Tear Gas/Water Cannon)	4.59 (106)	
Rubber bullets shootings	51.67 (1,191)	
Month		
October 2019	56.18 (1,295)	36.67 (1,217)
November 2019	38.04 (877)	54.06 (1,794)
December 2019	5.77 (133)	9.25 (307)
Total (N)	2,305	3,318

Note: Entries in percentages with N in parenthesis.

Estimation

Given the panel structure of the data, having information per municipality per day, and the fact that both the dependent and the right-hand side variables are counting

[9]I ended up using four categories since tear gas and water cannon were grouped in the category 'crowd control techniques'.

variables, it is necessary to use an estimation that (1) allows for overdispersion, that (2) accounts for the existence of zeros in the data generating process[10], and that (3) works for unbounded counts. I use a negative zero-inflated negative binomial model as suggested by Brooks et al. (2017). According to the authors, zero-inflated GLMs allow us to model count data using a mixture of a Poisson or negative binomial distribution, and a structural zero component (extra zeros). This model also allows events to be correlated.

Following Sudduth and Gallop (2023) implementation, I use the `glmmTMB` package which allows me to account for overdispersed protests and police repressive events data, as well as for the presence of zeros, i.e., municipalities that did not have protests or repressive events on a given day, which means having to deal with rows containing only zeros. It also allows me to account for specific dispersion parameters in the dependent variable, such as the day of the week, or dependence on climate conditions.[11]

Additionally, following the literature that highlights the importance of lagged variables in the study of social movements and protests (e.g. Beck and Katz, 1996; Earl and Soule, 2010; Opp and Roehl, 1990), and how they can be used to eliminate serial correlation of the errors (Beck and Katz, 2011), I included lagged explanatory variables of the dependent variable protest events occurrence, as well as lagged specifications for each of the four types of repressive actions, since I am interested in how previous experiences with police repression affect subsequent protest occurrence.

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

[10] This implies that the presence of excess zeros in the dataset suggests two distinct processes at play: one that generates the counts of protests (including days with no protests) and another, separate process responsible for the occurrence of zeros above and beyond what the count model (Poisson or negative binomial) predicts. This phenomenon indicates that there are days when the conditions for protests are not just absent but are structurally prevented, suggesting an underlying mechanism that inhibits protest activity entirely, distinct from merely a low rate of occurrence.

[11] Protests are more frequent during weekdays than during the weekend. Climate conditions, such as extreme temperatures (which are likely to happen during the summer), can also deter protests and/or police activity. Given that the data includes mostly spring days and the start of the summer days, this has to be taken into account.

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:

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

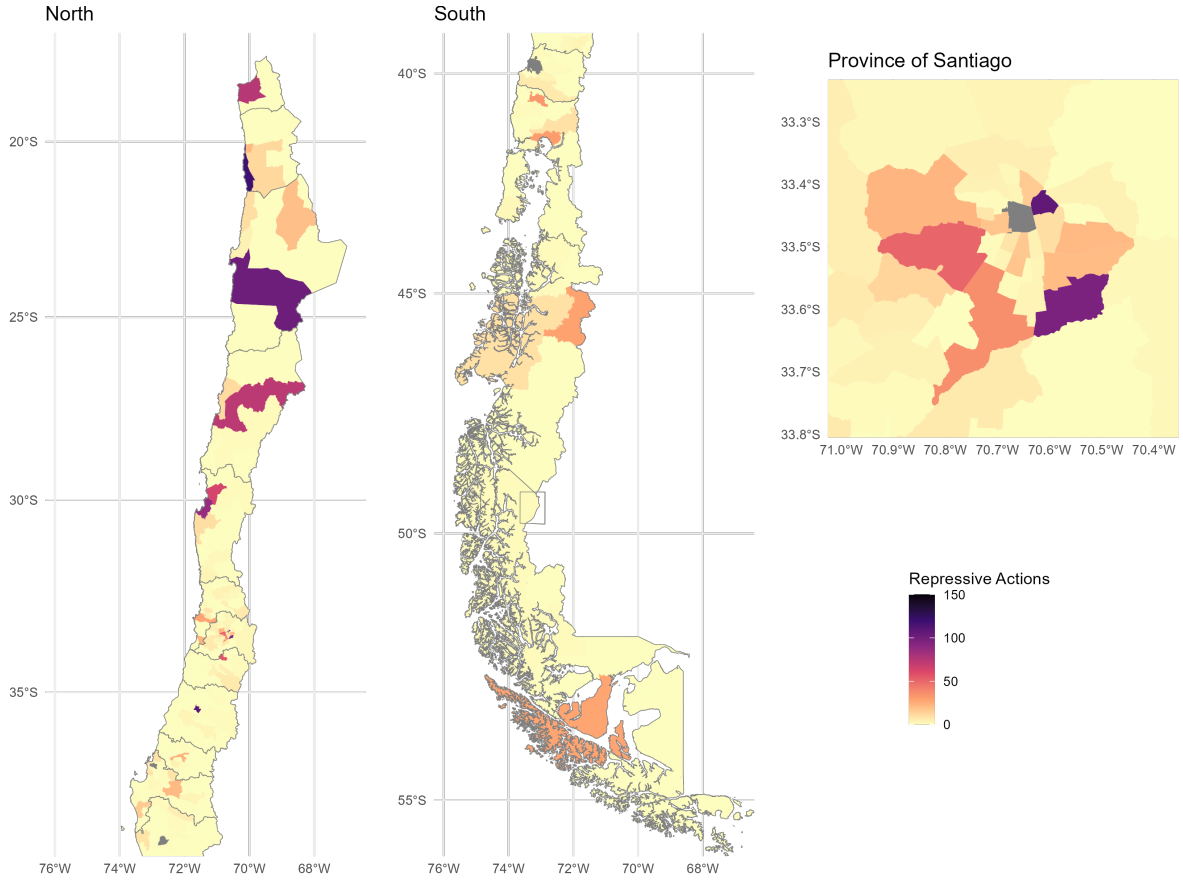
In Equation 2, β_0 is the intercept in the zero-inflation model, representing the baseline log odds of a protest event being a structural zero. β_m represents the coefficients corresponding to each zero-inflation predictor represented by $Z_{i,t-k}$ for each municipality i lagged by $t-k$.[12] In Equation 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. This proposed model facilitates the capturing of micro-dynamics within the interplay between protest and repression.

[12]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 precipitations.

Results

Figure 1 illustrates the distribution of repressive actions across the country, spanning from October 18 to December 31, 2019. A significant concentration of these actions is evident 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 correlation between the distribution of repressive actions and subsequent protest activities?

Figure 1: Number of Repressive Actions by Municipality



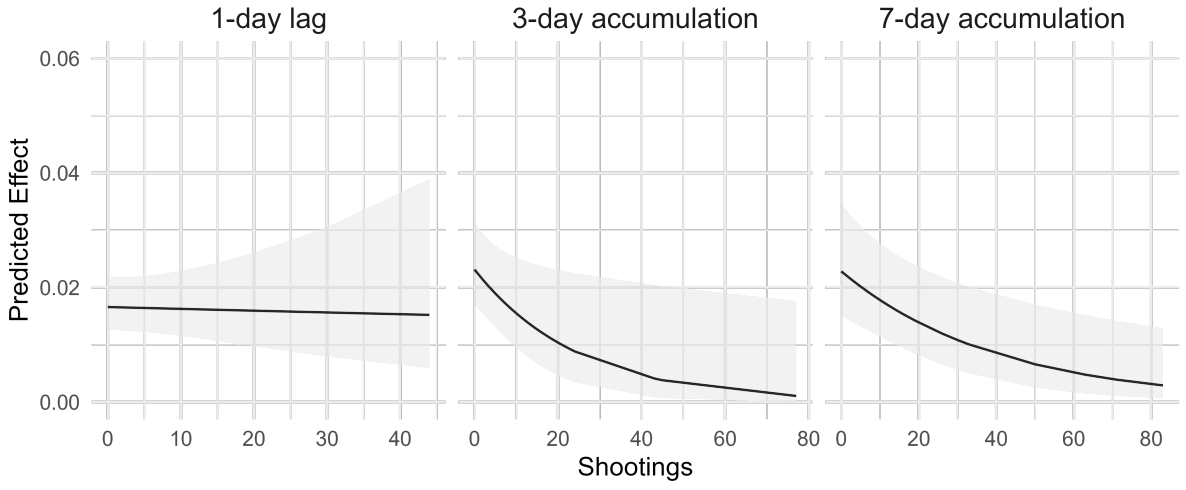
Note: The top right panel zooms into the Province of Santiago.

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 protest for the three days prior. Finally, a third model includes the accumulation of the seven days prior.[13] The full models are available in Table B.1. To ease interpretation, I calculated the predicted effects of different levels of repressive actions based on these models.

Figure 2 demonstrates the varying impacts of rubber bullet shootings on the frequency of subsequent protest events. In the left panel, a one-day lag analysis indicates a weak negative correlation between shootings and protests, yet this relationship shows no substantial amplification with an increase in the number of shootings. In stark contrast, the center and right panels, representing three-day and seven-day accumulations, reveal a deterrent effect on protest events. This effect is not only constant but intensifies as the amount of rubber bullet incidents grows, showing that while an immediate response to repression might be weak, a sustained strategy of repressive actions over time may in fact dampen the propensity for further protest, hinting at a potential threshold where the cumulative effect of state violence alters the willingness or ability of individuals to engage in protest.

Figure 2: Predicted Impact of Rubber Bullet Shootings on Protest Occurrence

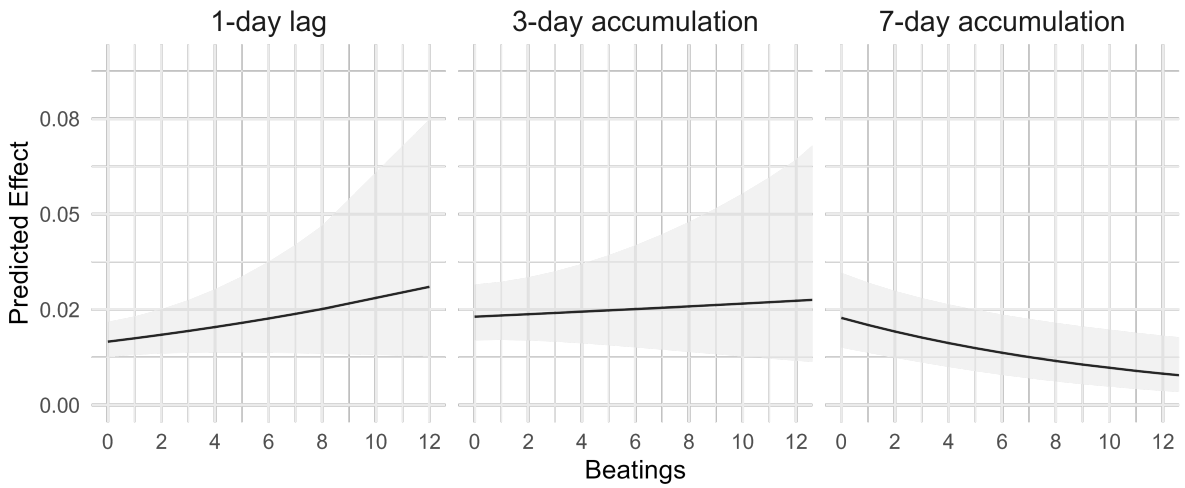


Note: Predicted effect based on models available in Table B.1. C.I.s at 95%.

[13]The reason for including the three-day accumulation is that it captures dynamics that happen on a weekend, 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.

Figure 3 examines the predicted influence of beating of demonstrators, on the occurrence of protests. The immediate response, as depicted in the one-day lag graph (left panel), shows an effect in protest frequency with an increased number of beatings, suggesting that immediate physical repression may, in fact, lead to a rise in protest activity the following day. This could be indicative of a backlash effect, where acts of violence against demonstrators spur further mobilization. As the analysis extends to cover the three-day and seven-day accumulations of such incidents, the trends diverge. In the seven-day accumulation graph, the trend shifts downward, suggesting that prolonged exposure to beatings over the course of a week might suppress the occurrence of protests.

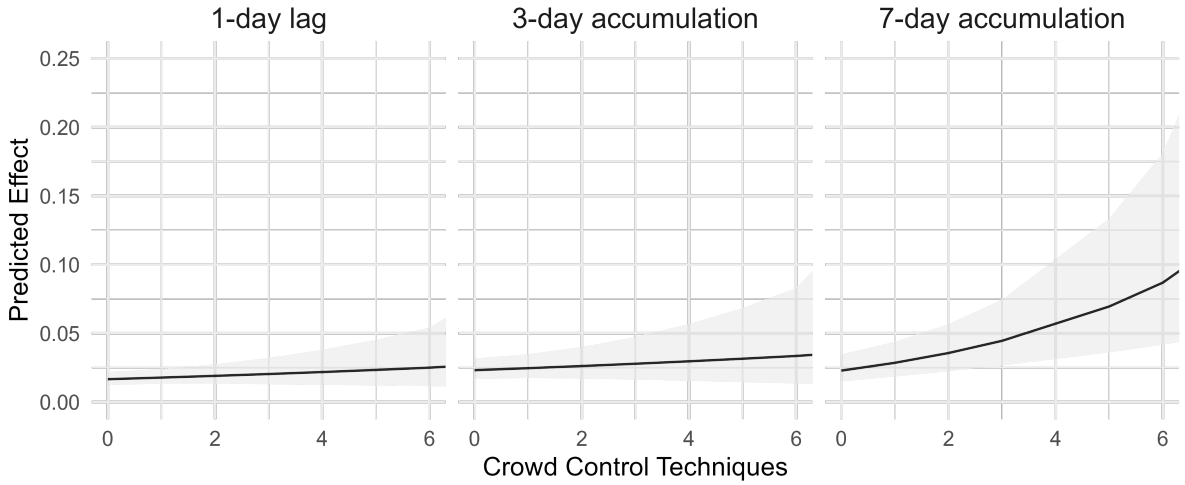
Figure 3: Predicted Impact of Beating of Demonstrators on Protest Frequency



Note: Predicted effect based on models available in Table B.1. C.I.s at 95%.

Figure 4 provides evidence on how crowd control measures——namely tear gas and water cannons——affect protest activity. In the immediate aftermath of these tactics (one-day lag), there is no significant effect on protest frequency. However, as we examine the effects over longer periods, a discernible trend emerges. This impact is more pronounced over a seven-day period, where the data shows a significant escalation in protest likelihood as the use of crowd control intensifies. These findings point to a potential delayed reaction to sustained repressive actions leading to a higher propensity for protests.

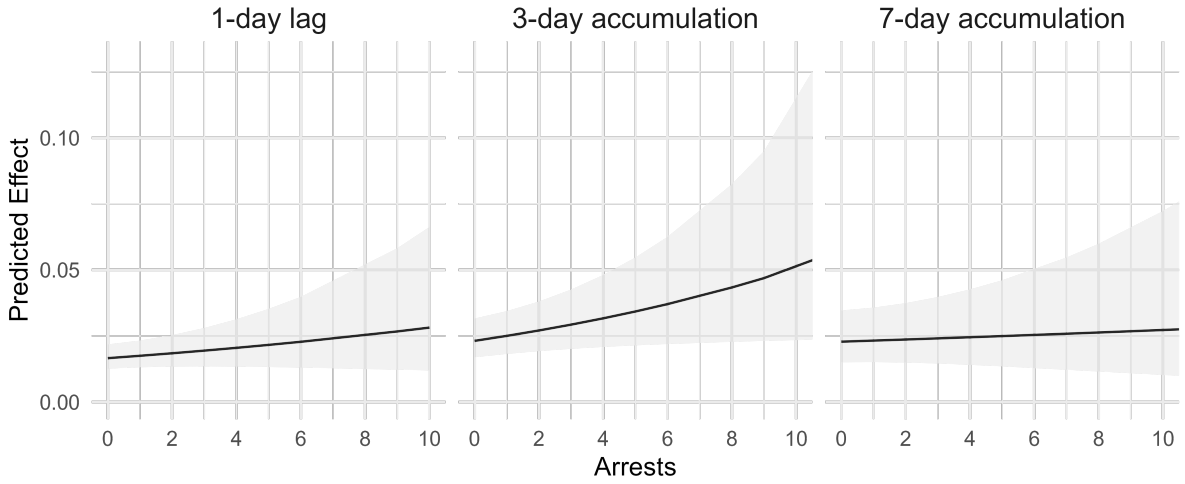
Figure 4: Predicted Impact of Crowd Control Techniques on Protest Frequency



Note: Predicted effect based on models available in Table B.1. C.I. at 95%.

Lastly, Figure 5 illustrates the relationship between arrests and protest frequency, revealing a nuanced pattern across various timeframes. Initially, a slight upward trend in the one-day lag graph indicates an immediate galvanization effect, where arrests seem to spur increased protest activity the following day. This effect intensifies in the three-day accumulation, suggesting a cumulative build-up of resolve to protest as arrests increase. However, the seven-day accumulation graph shows a less steep slope, implying that the impact of arrests on protest frequency experiences diminishing marginal returns over time. This pattern may reflect a complex interplay of adaptive protester responses and potential depletion of participants more susceptible to being arrested, leading to a nonlinear relationship where the influence of arrests is strongest in the short term but wanes as time progresses

Figure 5: Predicted Impact of Arrests on Protest Frequency



Note: Predicted effect based on models available in Table B.1. C.I. at 95%.

Description of the Mechanism

The aforementioned results reveal that, while immediate backlash happens as a response to arrests or beatings, other repressive actions like crowd control techniques only backfire when we consider longer periods of accumulation. On the contrary, rubber bullets have a deterrent effect on protests, although this effect is not immediate but an accumulation of the occurrence of the use of rubber bullets over three and seven days. I initially hypothesized that widespread deployments of high-cost repressive techniques would lead to an increase in mobilization (Hypothesis 1), and that targeted repression which is less likely to cause physical harm would decrease mobilization (Hypothesis 2). In this section, I reflect on these hypotheses after categorizing the previously discussed repressive tactics according to their level of targeting and costs. Additionally, I reexamined longstanding previous findings regarding the backfiring effect or the deterrent effect of repression, as shown in Table 1.

Following the conceptualization of 'patterns of violence' by Gutiérrez-Sanín and Wood (2017), for each repertory of violence, we can identify three elements: its (1) frequency, and (2) technique which is how violence is carried out against the (3) targeted population. Extending on that model, the main results of this study can be

understood as different combinations of targeting (targeted or widespread forms of repression), and the cost of the techniques (highly costly or with a low cost in relation to physical harm). Table 3 offers a taxonomy of the forms of repression examined in this study, classifying them according to their potential for the physical harm they pose, and their level of targeting. High-cost police tactics, such as shootings and beatings, are recognized for their significant potential for bodily harm.[14] In contrast, crowd control methods like the deployment of tear gas and water cannons, while distressing and disorienting, typically result in less severe physical injury and are therefore classified as low-cost.[15] Arrests, generally less physically injurious at the moment of apprehension, showed an increase in protest activity. The degree of targeting also varies, with beatings and arrests being more precise in singling out individuals, while the use of firearms and crowd control tools is deployed with a broader scope, affecting larger numbers without discrimination.

Table 3: Taxonomy of Police Repression Tactics by Costs and Targeting

		Targeting	
		Widespread	**Targeted**
Costs	**High**	Shootings	Beatings
	Low	Crowd Control	Arrests

Note: Based on conceptualizations made by Gutiérrez-Sanín and Wood (2017).

The findings of this study refine the proposed hypotheses by highlighting the temporal complexities in the relationship between repression and protest mobilization. In contrast to Hypothesis 1, which anticipated that widespread, costly repression would lead to a

[14] Being shot by a rubber bullet and being a victim of a beating are arguably the most costly repressive actions of the ones measured in this study. Hundreds of protesters in Chile lost one or both eyes due to rubber bullets. Chile became the country with the highest worldwide rate of ocular trauma caused by kinetic impact projectiles during protests (Rodríguez et al., 2021). Additionally, police beatings can also represent high costs to the physical integrity of protesters.

[15] Additional sources of data that have also delved into the justifications of police violence have shown that crowd control methods, specifically the use of tear gas, as a repressive technique that is sometimes/often/always justified for 58.5% of respondents, while the use of rubber bullets, in contrast, is never/rarely justified by 66.6% of respondents (see Table C.1).

backlash effect, the results show that shootings do not lead to a backlash effect, but the opposite: a marked deterrent effect within the accumulation of three and seven days. This points out that repression's ubiquity is not sufficient to generate backlash, and that the high costs will be taken into account when deciding whether or not to mobilize. Regarding Hypothesis 2, which contested that targeted repression that is less likely to cause physical harm will decrease mobilization, we see the opposite dynamic, as arrests have a consistent backlash effect regardless of the temporal window in which they are observed. Again, this targeted form of repression is not enough to quell dissent.

As for the backfiring effects identified by the literature in terms of widespread/low-cost repression, and the dissuading effects of targeted/high-cost repression, the results provide evidence in favor of these results, but they also urge us to take into account the time dimension. In the case of crowd control techniques, the backfiring effect is only captured in its seven-day accumulation. On the other hand, the dissuasive effect of police beatings is only captured in its seven-day accumulation. If we were only to observe the immediate effect of both forms of repression, the results would be misleading, and we would not be able to effectively capture the dynamics that repression generates during mobilization.

To understand the mechanism behind the deterrent and the backlash effect of different repressive activities, I use individual-level public opinion data from the National Public Opinion Study elaborated by CEP (2020).[16] I leverage the fact that the last measurement of 2019 was conducted precisely at the time of the protests, and the survey included ad-hoc questions to explore the role of the sociopolitical crisis in public opinion. Following Carrasco and Pavlic (2023), who focus, among other things, on the potential effect of protest participation on the perception of human rights violations during the protests in Chile, I focus not on participation but proximity with repressive incidents, combining this individual-level data with the previously used data on repressive events at the local level (i.e., municipality) where the respondents live.

[16]More information about this survey is available in Appendix D.

Table 4 presents the effect of police repression tactics deployed at the municipal level on two dependent variables. The first variable, depicted in Models 1 and 2, 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'. The second variable, outlined in Models 3 and 4, concerns perceptions of human rights violations by the police (Carabineros) since the onset of the crisis in October 2019, with responses varying 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 previous, local-level findings, revealed that widespread, high-cost repression, such as the use of rubber bullets, has a deterrent effect on protests, albeit not immediately, and that targeted, low-cost repression, such as arrests, possesses a backlash effect. When contrasting the individual-level data, we see how arrests happening on the previous day of the survey increased respondents' level of justification for protests but reduced their perception of human rights abuses by the police, which may suggest how respondents differentiate between the necessity of maintaining order and the outright violation of rights. On the other hand, the shooting of rubber bullets also has a negative effect on 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 seem 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 4: Models for Protest Justification and Human Rights Violations

	Protest Justification		Perception of Human Rights Violations	
	Model 1	Model 2	Model 3	Model 4
Shootings_{t-1}	−0.002		−0.072***	
	(0.040)		(0.025)	
Beatings_{t-1}	−0.007		−0.031	
	(0.257)		(0.042)	
Arrests_{t-1}	0.255**		−0.133***	
	(0.115)		(0.044)	
$\text{Crowd Control}_{t-1}$	0.263***		0.098**	
	(0.053)		(0.039)	
$\text{Police per 100k}_{t-1}$	−0.042		0.014	
	(0.039)		(0.017)	
$\text{Shootings}_{t-3\ acc}$		0.101***		−0.030
		(0.038)		(0.020)
$\text{Beatings}_{t-3\ acc}$		−0.147		−0.020
		(0.157)		(0.043)
$\text{Arrests}_{t-3\ acc}$		0.291		−0.083
		(0.222)		(0.068)
$\text{Crowd Control}_{t-3\ acc}$		0.374		0.136**
		(0.380)		(0.067)
$\text{Police per 100k}_{t-3\ acc}$		−0.014		0.003
		(0.014)		(0.007)
Num.Obs.	1445	1474	1385	1414
R^2	0.227	0.225	0.462	0.459
R^2 Adj.	0.157	0.155	0.410	0.408
SE	Municipality	Municipality	Municipality	Municipality
FE Municipality	✓	✓	✓	✓

Note: Full models available in Appendix D. * p < 0.1, ** p < 0.05, *** p < 0.01

Conclusion

Why do specific repressive actions increase the occurrence of protests when such crowd control mechanisms are supposed to do exactly the opposite? Tilly (1978) argued that state coercion increases the costs of collective action, and therefore, that repression has negative effects on mobilization. More recent studies have also shown that people engage less in street protests when their perceptions of violence and risk increase (Dave et al., 2020; Steinert-Threlkeld et al., 2022). Given that this association is very context-dependent, I examined how this relationship unfolds in the case of the Chilean protests that took place starting in October 2019, proposing a novel approach that distinguishes between different forms of police repression that are used in democratic regimes.

My primary objective was to assess whether repressive actions against demonstrators during protests deter or amplify the occurrence of subsequent contentious events. In analyzing the 2019 Chilean social outburst, I find that contrary to the assumption that repression consistently deters protests, specific forms of repression can indeed trigger a backlash effect, thereby increasing the likelihood of further mobilization but only for repression that is low-cost in terms of physical harm, and dependent on the temporal dimension. Police beatings, in particular, were found to significantly heighten the occurrence of subsequent contentious events in the short term. This aligns with prior research which suggests that high-cost forms of repression, capable of generating public outrage, can lead to increased mobilization (Khawaja, 1993; della Porta, 2013; Jasper, 2014), and may shift individuals' tolerance for previously unacceptable costs (Pearlman, 2013). Nevertheless, this occurs only in the short term; in the long term, both forms of costly repression (shooting and beatings) deter protests, regardless of their level of targeting. On the contrary, crowd control techniques and arrests backfire. I analyzed the mechanisms behind these findings using individual public opinion data and found that individuals living in municipalities where crowd control techniques took place tend to show more favorable opinions on protest justification, as well as a higher perception that the police have violated human rights.

Assessing the consequences of such repression poses significant challenges for social

movement scholars. The scarcity and difficulty in accessing reliable data on police repression, compounded by the endogeneity problems where the propensity for dissent is influenced by repression itself, make it a complex field to navigate (Ritter and Conrad, 2016). In this study, I address these challenges by focusing on spatial dynamics and immediate responses to police repression in Chile. Despite the robustness of this data source, challenges such as the potential underreporting of protest events persist. While the Observatory's press-based methodology ensures comprehensive coverage of protest events, replicating this study in other contexts might be challenging, particularly in countries with limited media diversity or where state control over media and social networks is prevalent.

This study's insights into the dynamics of repression and mobilization within Chile's democratic context may not extend to authoritarian regimes or countries experiencing democratic backsliding, given the unique oversight and residual legitimacy of Chile's national police and the relatively moderate risks faced by protesters compared to places where severe repression is more common. Additionally, while identifying a backlash effect in protest occurrence, the study does not capture variations in protest size, which could exhibit different patterns in response to state violence (Steinert-Threlkeld et al., 2022), leaving unanswered questions about the characteristics of protests that follow repressive acts. Despite these constraints, the findings offer a foundational analysis of the effects of police strategies on protests, providing a basis for further investigation into the nuanced interplay between state actions and public response

Future research should incorporate a geographical 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, pitting communities against both government and private entities. Investigating how these geographical distinctions influence responses to police violence could provide valuable insights. Additionally, the emotional reactions elicited by state coercion, particularly how repression can generate outrage and, in turn, fuel

mobilization, merit further exploration. Future studies should aim to identify which specific forms of repression are most likely to provoke outrage and the underlying reasons for these reactions, as conceptualizing backlash solely in terms of protest frequency simplifies its complex nature, overlooking shifts in protest tactics, demographics, sustainability of efforts, and other expressions of resistance (Hager and Krakowski, 2022; Ellefsen, 2021).

References

Amnesty International (2020). *Eyes on Chile: Police violence and command responsability during the period of social unrest*. Tech. rep., p. 110. (Visited on 12/01/2020).

Aytaç, S. Erdem, Luis Schiumerini, and Susan Stokes (2017). "Protests and Repression in New Democracies". In: *Perspectives on Politics* 15.1, pp. 62–82.

Baeza, Angélica (2019). *Evasión masiva de alumnos del Instituto Nacional en el Metro termina con denuncia en Fiscalía y medidas de contención*. URL: https://www.latercera.com/nacional/noticia/evasion-masiva-alumnos-del-instituto-nacional-metro-termina-denuncia-fiscalia-medidas-contencion/857409/ (visited on 02/22/2022).

Balcells, Laia, Spencer Dorsey, and Juan F. Tellez (2021). "Repression and dissent in contemporary Catalonia". In: *British Journal of Political Science* 51.4, pp. 1742–1750.

Bautista, Maria Angélica et al. (2020). "The Geography of Repression and Opposition to Autocracy". In: *American Journal of Political Science* Forthcoming.

Beck, Nathaniel and Jonathan N. Katz (1996). "Nuisance vs. Substance: Specifying and Estimating Time-Series-Cross-Section Models". In: *Political Analysis* 6, pp. 1–36.

— (2011). "Modeling Dynamics in Time-Series–Cross-Section Political Economy Data". In: *Annual Review of Political Science* 14.1, pp. 331–352.

Boykoff, Jules (2007). "Limiting Dissent: The Mechanisms of State Repression in the USA". In: *Social Movement Studies* 6.3, pp. 281–310.

Brockett, Charles D. (1993). "A Protest-Cycle Resolution of the Repression/Popular-Protest Paradox". In: *Social Science History* 17.3, pp. 457–484.

Brooks, Mollie E et al. (2017). "Modeling zero-inflated count data with glmmTMB". In: URL: https://doi.org/10.1101/132753.

Carey, Sabine C. (Feb. 2010). "The use of repression as a response to domestic dissent". In: *Political Studies* 58.1, pp. 167–186.

Carrasco, Silvia F. and Rodolfo Disi Pavlic (2023). "Predictors of perceptions of human rights violations during the Chilean social outburst of 2019". In: *Frontiers in Psychology* 14.

Centre for Social Conflict and Cohesion Studies (2020). *Observatory of Conflicts - Cumulative Dataset*. Version V7. URL: https://doi.org/10.7910/DVN/GKQXBR.

Chiang, Amy Yunyu (Nov. 2021). "Violence, non-violence and the conditional effect of repression on subsequent dissident mobilization". In: *Conflict Management and Peace Science* 38 (6), pp. 627–653.

Christensen, Darin and Francisco Garfias (2018). "Can you hear me now? How communication technology affects protest and repression". In: *Quarterly Journal of Political Science* 13.1, pp. 89–117.

Clark, David and Patrick Regan (2016). *Mass Mobilization Protest Data*. Version V5. URL: https://doi.org/10.7910/DVN/HTTWYL.

Curtice, Travis B. and Brandon Behlendorf (2021). "Street-level Repression: Protest, Policing, and Dissent in Uganda". In: *Journal of Conflict Resolution* 65.1, pp. 166–194.

Dave, Dhaval et al. (2020). *Black Lives Matter Protests and Risk Avoidance: The Case of Civil Unrest During a Pandemic*. NBER Working Papers 27408.

Davenport, Christian (2005). "Introduction: Repression and Mobilization: Insights from Political Science and Sociology". In: *Repression and Mobilization*, pp. vii–xli.

— (2007). "State repression and political order". In: *Annual Review of Political Science* 10, pp. 1–23.

della Porta, Donatella (1997). "The policing of protest: Repression, bargaining, and the fate of social movements". In: *African Studies* 56.1, pp. 97–127.

— (2012). "Social movements and the state: Thoughts on the policing of protest". In: *Comparative Perspectives on Social Movements*. Cambridge University Press.

— (2013). *Can democracy be saved? Participation, deliberation and social movements*. Cambridge: Polity Press.

della Porta, Donatella and Olivier Fillieule (2004). "Policing Social Protest". In: *The Wiley Blackwell Companion to Social Movements*. New Jersey: Blackwell Publishing Ltd.

Demirel-Pegg, Tijen and Karen Rasler (Feb. 2021). "The Effects of Selective and Indiscriminate Repression on the 2013 Gezi Park Nonviolent Resistance Campaign". In: *Sociological Perspectives* 64 (1), pp. 58–81.

Digrazia, Joseph (2014). "Individual protest participation in the united states: Conventional and unconventional activism". In: *Social Science Quarterly* 95.1, pp. 111–131.

Dornschneider-Elkink, Stephanie and Bruce Edmonds (Jan. 2024). "Does Non-violent Repression Have Stronger Dampening Effects than State Violence? Insight from an Emotion-Based Model of Non-violent Dissent". In: *Government and Opposition* 59 (1), pp. 249–271.

Earl, Jennifer (2003). "Tanks, tear gas, and taxes: Toward a theory of movement repression". In: *Sociological Theory* 21.1, pp. 44–68.

— (2011). "Political repression: Iron fists, velvet gloves, and diffuse control". In: *Annual Review of Sociology* 37.1, pp. 261–284.

Earl, Jennifer and Sarah A. Soule (Jan. 2010). "The Impacts of Repression: The Effect of Police Presence and Action on Subsequent Protest Rates". In: *Research in Social Movements, Conflicts and Change* 30, pp. 75–113.

Earl, Jennifer, Sarah A. Soule, and John D. McCarthy (2003). "Protest under Fire ? Explaining the Policing of Protest". In: *American Sociological Review* 68.4, pp. 581–606.

Ellefsen, Rune (Mar. 2021). "The Unintended Consequences of Escalated Repression". In: *Mobilization* 26 (1), pp. 87–108.

Estudios Públicos, Centro de (2020). *Manual del Usuario Encuesta CEP Nº 84 Estudio Nacional de Opinión Pública Nº 54*. URL: http://bit.ly/encuestas-cep.

Gamson, W.A. (1975). *The Strategy of Social Protest*. Dorsey series in sociology. Dorsey Press.

García-Ponce, Omar and Benjamin Pasquale (2015). *How Political Repression Shapes Attitudes toward the State*.

Garfias, Francisco and Beatriz Magaloni (2018). "Taking to the Streets Protests and Regime Survival".

Gurr, Ted Robert (1970). *Why Men Rebel*. Boulder, CO: Paradigm Publishers.

Gurr, Ted Robert and Will H. Moore (1997). "Ethnopolitical Rebellion: A Cross-Sectional Analysis of the 1980s with Risk Assessments for the 1990s". In: *American Journal of Political Science* 41.4, p. 1079.

Gutiérrez-Sanín, Francisco and Elisabeth Jean Wood (2017). "What Should We Mean by Pattern of Political Violence? Repertoire, Targeting, Frequency, and Technique". In: *Perspectives on Politics* 15.1, pp. 20–41.

Hager, Anselm and Krzysztof Krakowski (May 2022). "Does State Repression Spark Protests? Evidence from Secret Police Surveillance in Communist Poland". In: *American Political Science Review* 116 (2), pp. 564–579.

Hess, David and Brian Martin (2006). "Repression, backfire, and the theory of transformative events". In: *Mobilization* 11.2, pp. 249–267.

Heuer, Vera and Brent Hierman (2022). "Manhandling and mediation: unpacking the repressive repertoire in Kazakhstan's 2016 anti-land reform protests". In: *Asian Security*.

Honari, Ali (2018). "From 'the effect of repression' toward 'the response to repression'". In: *Current Sociology* 66.6, pp. 950–973.

INDH (2019). *22 personas lesionadas, denuncias de desnudamientos, torturas y malos tratos por Fuerzas de Orden dejan jornadas de protestas*. URL: https://www.indh.cl/22-personas-lesionadas-denuncias-de-desnudamientos-torturas-y-malos-tratos-por-fuerzas-de-orden-dejan-jornadas-de-protestas/ (visited on 06/04/2021).

— (2020). *Mapa de violaciones a los derechos humanos*. URL: https://mapaviolacionesddhh.indh.cl/public/investigadores (visited on 03/03/2022).

Jasper, James M. (2014). “Constructing indignation: Anger dynamics in protest movements”. In: *Emotion Review* 6.3, pp. 208–213.

Josua, Maria and Mirjam Edel (2015). “To Repress or Not to Repress—Regime Survival Strategies in the Arab Spring”. In: *Terrorism and Political Violence* 27.2, pp. 289–309.

Kalyvas, Stathis N. (May 2006). *The Logic of Violence in Civil War*. Cambridge University Press. URL: https://www.cambridge.org/core/product/identifier/9780511818462/type/book.

Kang, Sooyeon (Jan. 2023). “Upping the ante without taking up arms: Why mass movements escalate demands”. In: *Journal of Peace Research* 60 (1), pp. 73–87.

Khawaja, Marwan (1993). “Repression and Popular Collective Action: Evidence from the West Bank”. In: *Sociological Forum* 8.1, pp. 47–71.

Klein, Graig R., José Cuesta, and Cristian Chagalj (Apr. 2022). “The Nicaragua Protest Crisis in 2018–2019: Assessing the Logic of Government Responses to Protests”. In: *Journal of Politics in Latin America* 14.1, pp. 55–83.

Kobayashi, Tetsuro, Jaehyun Song, and Polly Chan (2021). “Does repression undermine opposition demands? the case of the Hong Kong National Security Law”. In: *Japanese Journal of Political Science* 22.4, pp. 268–286.

Lachapelle, Jean (Nov. 2021). “Repression Reconsidered: Bystander Effects and Legitimation in Authoritarian Regimes”. In: *Comparative Politics* 54.4, pp. 695–716.

Lichbach, Mark Irving (1987). “Deterrence or Escalation ? The Puzzle of Aggregate Studies of Repression and Dissent”. In: *The Journal of Conflict Resolution* 31.2, pp. 266–297.

Mok, Chit Wai John (Sept. 2022). “Violent repression, relational positions and emotional mechanisms in Hong Kong’s anti-extradition movement”. In: *Mobilization* 27.3, pp. 297–317.

Opp, Karl-Dieter and Wolfgang Roehl (1990). “Repression, Micromobilization, and Political Protest”. In: *Social Forces* 69.2, pp. 521–547.

Pearlman, Wendy (2013). “Emotions and the microfoundations of the Arab uprisings”. In: *Perspectives on Politics* 11.2, pp. 387–409.

Rasler, Karen (1996). "Concessions, repression, and political protest in the Iranian revolution". In: *American Sociological Review* 61.1, pp. 132–152.

Ritter, Emily Hencken and Courtenay R. Conrad (2016). "Preventing and responding to dissent: The observational challenges of explaining strategic repression". In: *American Political Science Review* 110.1, pp. 85–99.

Rodríguez, Álvaro et al. (2021). "Ocular trauma by kinetic impact projectiles during civil unrest in Chile". In: *Eye* 35.6, pp. 1666–1672.

Rogel, Ángel (2019). *Piñera pide perdón y anuncia agenda social que implicará "esfuerzo grande"*. URL: https://www.diarioconcepcion.cl/politica/2019/10/23/pinera-pide-perdon-y-anuncia-agenda-social-que-implicara-esfuerzo-grande.html (visited on 02/22/2022).

Rojas, Carolina (2019). *Así las reprimen en Estado de Excepción: Mujeres denuncian golpizas, humillaciones y amenazas de violación*. URL: https://www.eldesconcierto.cl/nacional/2019/10/21/asi-las-reprimen-en-estado-de-excepcion-mujeres-denuncian-golpizas-humillaciones-y-amenazas-de-violacion.html (visited on 06/04/2012).

Schulte, Felix and Christoph V. Steinert (2023). "Repression and backlash protests: Why leader arrests backfire". In: *International Interactions* 49 (1), pp. 1–30.

Shadmehr, Mehdi and Raphael Boleslavsky (Jan. 2022). "International Pressure, State Repression, and the Spread of Protest". In: *Journal of Politics* 84.1, pp. 148–165.

Sharp, Gene (1973). *The Politics of Nonviolent Action*. New York: Porter Sargent.

Smithey, Lee A. and Lester R. Kurtz (2018). ""Smart" Repression". In: *The Paradox of Repression and Nonviolent Movements*. Ed. by Lee A. Smithey and Lester R. Kurtz. New York: Syracuse University Press, pp. 185–214.

Steinert-Threlkeld, Zachary C., Alexander M. Chan, and Jungseock Joo (Apr. 2022). "How State and Protester Violence Affect Protest Dynamics". In: *Journal of Politics* 84.2, pp. 798–813.

Sudduth, Jun Koga and Max Gallop (July 2023). “Spatial Dynamics of Election Violence: How Repression Spreads Dissent around Elections”. In: *The Journal of Politics* 85 (3), pp. 933–948.

Sullivan, Christopher M. (2016). “Political Repression and the Destruction of Dissident Organizations”. In: *World Politics* 68.4, pp. 645–676.

Sullivan, Christopher M., Cyanne E. Loyle, and Christian Davenport (2012). “The Coercive Weight of the Past: Temporal Dependence and the Conflict-Repression Nexus in the Northern Ireland "Troubles"”. In: *International Interactions* 38.4, pp. 426–442.

Sutton, Jonathan, Charles R. Butcher, and Isak Svensson (2014). “Explaining political jiu-jitsu: Institution-building and the outcomes of regime violence against unarmed protests”. In: *Journal of Peace Research* 51.5, pp. 559–573.

Tilly, Charles (1978). *From Mobilization to Revolution*. From Mobilization to Revolution. McGraw-Hill.

Van Zomeren, Martijn et al. (2004). “Put your money where your mouth is! Explaining collective action tendencies through group-based anger and group efficacy”. In: *Journal of Personality and Social Psychology* 87.5, pp. 649–664.

Waddington, Peter A. J. (1997). *The Policing of Mass Demonstration in Contemporary Democracies, Controlling Protest in Contemporary, Historical and Comparative Perspective*. European University Institute.

Young, Lauren E. (2019). “The Psychology of State Repression: Fear and Dissent Decisions in Zimbabwe”. In: *American Political Science Review* 113.1, pp. 140–155.

Online Supplementary Information

The Backlash Effect of State Coercion:

Protest Resilience Under Costly and Targeted Repression

February, 2024

Contents

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.1.3 Recodification of repressive acts

Water impact and wetting with chemicals were merged into the same category, home invasion, and unauthorized entering.

Table A.1: Distribution of the total of repressive actions

Repression Type	Frequency	%
Shooting	1258	45.448
Beating	956	34.538
Detention	274	9.899
Gassed	91	3.288
Water impact	47	1.698
Threats	40	1.445
Hit by a car	37	1.337
Unauthorized entry/invasion	30	1.084
Asphyxia	7	0.253
Stripping	7	0.253
Obstruction medical assistance	4	0.145
Stone throwing	4	0.145
Touching	4	0.145
Stigmatization	3	0.108
Destruction personal items	2	0.072
Follow up	2	0.072
Attack with Animals	1	0.036
Burned	1	0.036

B Models

B.1 Lagged variables

Arguably, the occurrence of protest events at time t will be influenced by previous protests and repressive acts at time t–1. In this case, we would have to deal with a dynamic stochastic process. Taking Figure B.1, I am interested in capturing the effect of repressive actions at time t–1 and their effect on protest occurrence at time t (red line). To accurately capture this, I need to include lagged specifications of both variables in the final models.

Figure B.1: DAG

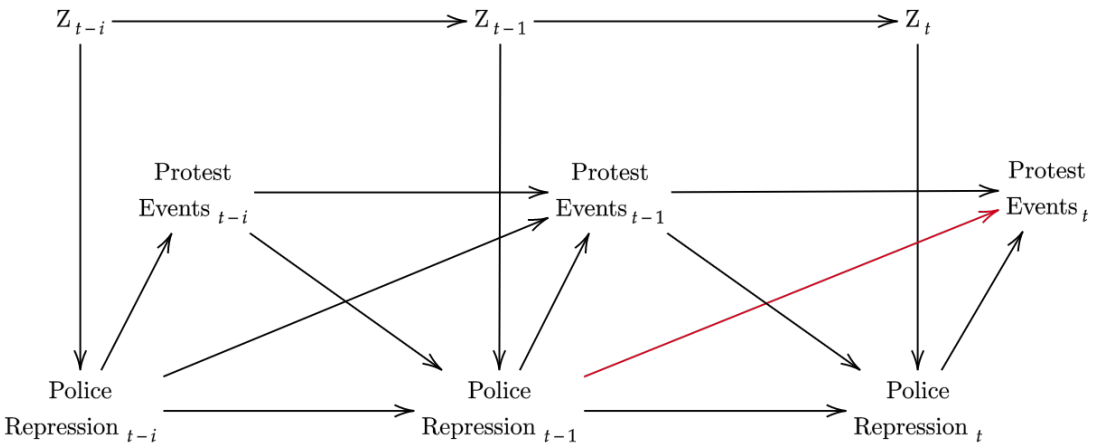


Table B.1: Zero-inflated Negative Binomial Models. Dependent Variable: Protest Events$_t$

	Model 1	Model 2	Model 3	Model 4
Shootings$_{t-1}$	0.198***	−0.002		
	(0.065)	(0.010)		
Beatings$_{t-1}$	0.812***	0.052		
	(0.102)	(0.035)		
Arrests$_{t-1}$	0.195	0.053		
	(0.185)	(0.041)		
Crowd Control$_{t-1}$	0.149	0.068		
	(0.243)	(0.062)		
Protests$_{t-1}$	1.154***	0.102***		
	(0.052)	(0.010)		
Police per 100k$_{t-1}$		0.018***		
		(0.005)		
Rain$_{t-1}$		−0.019		
		(0.073)		
Hot Day$_{t-1}$		−0.586***		
		(0.081)		
Weekday		0.584***		
		(0.066)		
Distance Province Capital (Kms.)		−0.014***	−0.017***	−0.012***
		(0.002)	(0.003)	(0.003)
Shootings$_{t-3\ acc}$			−0.040**	
			(0.018)	
Beatings$_{t-3\ acc}$			0.014	
			(0.034)	
Arrests$_{t-3\ acc}$			0.078**	
			(0.036)	
Crowd Control$_{t-3\ acc}$			0.062	
			(0.072)	
Protests$_{t-3\ acc}$			0.114***	
			(0.010)	
Police per 100k$_{t-3\ acc}$			0.006*	
			(0.003)	
Rain$_{t-3\ acc}$			−0.034	
			(0.060)	
Hot Day$_{t-3\ acc}$			−0.202***	
			(0.057)	
Shootings$_{t-7\ acc}$				−0.025***
				(0.009)
Beatings$_{t-7\ acc}$				−0.085***
				(0.027)
Arrests$_{t-7\ acc}$				0.018
				(0.044)
Crowd Control$_{t-7\ acc}$				0.223***
				(0.052)
Protests$_{t-7\ acc}$				0.131***
				(0.012)
Police per 100k$_{t-7\ acc}$				0.003
				(0.002)
Rain$_{t-7\ acc}$				0.051
				(0.048)
Hot Day$_{t-7\ acc}$				0.005
				(0.043)
SD (Intercept Municipality)		1.590	1.363	1.119
Num.Obs.	25 604	22 422	7575	3030
R^2 Marg.	0.333	0.087	0.118	0.084
R^2 Cond.		0.366	0.336	0.219
AIC	14 392.0	10 668.8	3434.0	1328.6
BIC	14 449.0	10 781.0	3524.1	1406.8
ICC		0.3	0.2	0.1
RMSE	647.03	0.68	0.59	0.42

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 province capital. * p < 0.1, ** p < 0.05, *** p < 0.01

C OLES Survey

The survey elaborated by the *Observatorio de Violencia y Legitimidad Social* is a study conducted as a part of a bigger project called Centre for Social Conflict and Cohesion Studies (COES), which develops collaborative research on issues related to social conflict and cohesion (coexistence) in Chile, through a multidisciplinary team from the social sciences and humanities.

In particular, the objectives of the OLES survey are (1) to evaluate the perceptions of legitimacy about the police *Carabineros* in the Chilean population over time, (2) to evaluate the effect of perceptions of justice on the treatment and procedures used by *Carabineros* when interacting with the citizenry, and the perception of legitimacy of the same, and (3) to evaluate the effect of the perception of legitimacy on the justification of violence, the tolerance of state violence, and the approval of repressive or punitive social control measures.

Methodologically, this study involved conducting an online panel (longitudinal) survey, considering three measurements with three months between each wave (January 2021, June 2021, and November 2021). The universe was considered to be people over 18 years of age living in Chile.

This project has the approval of the Ethics Committee of the Universidad Diego Portales. The data are available upon request.

Table C.1: Justification of *Carabineros* Violence

Variable	Never	Rarely	Sometimes	Often	Always
Use of tear gas	22.70 (1221)	18.52 (996)	32.18 (1731)	15.32 (824)	11.28 (607)
Use of rubber bullets	49.76 (2679)	17.37 (935)	15.23 (820)	9.68 (521)	7.97 (429)
Beat demonstrators if destroying public property	42.05 (2263)	17.95 (966)	19.64 (1057)	11.22 (604)	9.14 (492)
Beat demonstrators if resisting arrest	47.39 (2548)	19.96 (1073)	16.79 (903)	8.26 (444)	7.61 (409)
Beat demonstrators inside police vehicle	73.57 (3959)	8.77 (472)	8.33 (448)	5.58 (300)	3.75 (202)
Insult demonstrators	80.59 (4330)	6.29 (338)	6.23 (335)	4.50 (242)	2.38 (128)
Evicting students from occupied school	41.11 (2209)	17.16 (922)	21.61 (1161)	11.26 (605)	8.86 (476)

Note: Numbers in percentages, observations within parentheses. These questions are part of Module B of the survey, titled "Attitude towards *Carabineros* violence". The Module lists a series of actions linked to the main question "There are different actions that the carabineros can carry out as part of their task of maintaining order at demonstrations. To what extent do you think the following actions are justified?".

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 which has been held periodically since 1987. The survey seeks to know the concerns, preferences, and needs of the population as well as to reflect the continuities and changes experienced by Chilean society. The survey targeted the population of individuals aged 18 and older across the entire country, both in urban and rural settings, with the exclusion of Easter Island. This coverage decision was based on the demographic data provided by the 2017 Census, ensuring a comprehensive representation of the country's population while omitting Easter Island due to its unique demographic characteristics.

In the execution of 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 employed was both 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, and a notable response rate of 71% was achieved with the original subjects, underscoring the survey's effectiveness in engaging participants.

Regarding the survey's precision, the sampling error was estimated at $\pm 3\%$, taking into account 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.[1]

D.1 Protest Justification and Perceptions of Human Rights Violations

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).

[1]This information was obtained from the technical report of the survey (CEP, 2019).

Table D.1: Models for Protest Justification

	Model 1	Model 2	Model 3
Shootings_{t-1}	−0.002		
	(0.040)		
Beatings_{t-1}	−0.007		
	(0.257)		
Arrests_{t-1}	0.255**		
	(0.115)		
$\text{Crowd Control}_{t-1}$	0.263***		
	(0.053)		
$\text{Police per 100k}_{t-1}$	−0.042		
	(0.039)		
$\text{Shootings}_{t-3\ acc}$		0.101***	
		(0.038)	
$\text{Beatings}_{t-3\ acc}$		−0.147	
		(0.157)	
$\text{Arrests}_{t-3\ acc}$		0.291	
		(0.222)	
$\text{Crowd Control}_{t-3\ acc}$		0.374	
		(0.380)	
$\text{Police per 100k}_{t-3\ acc}$		−0.014	
		(0.014)	
$\text{Shootings}_{t-7\ acc}$			0.043
			(0.030)
$\text{Beatings}_{t-7\ acc}$			0.036
			(0.053)
$\text{Arrests}_{t-7\ acc}$			0.214**
			(0.089)
$\text{Crowd Control}_{t-7\ acc}$			0.577*
			(0.305)
Police per 100k			0.020
			(0.014)
Num.Obs.	1445	1474	1474
R^2	0.227	0.225	0.228
R^2 Adj.	0.157	0.155	0.159
AIC	5459.5	5566.2	5559.5
BIC	6103.2	6212.3	6205.6
RMSE	1.47	1.47	1.47
SE	Municipality	Municipality	Municipality
FE Municipality	✓	✓	✓

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table D.2: Models for Human Rights Violations

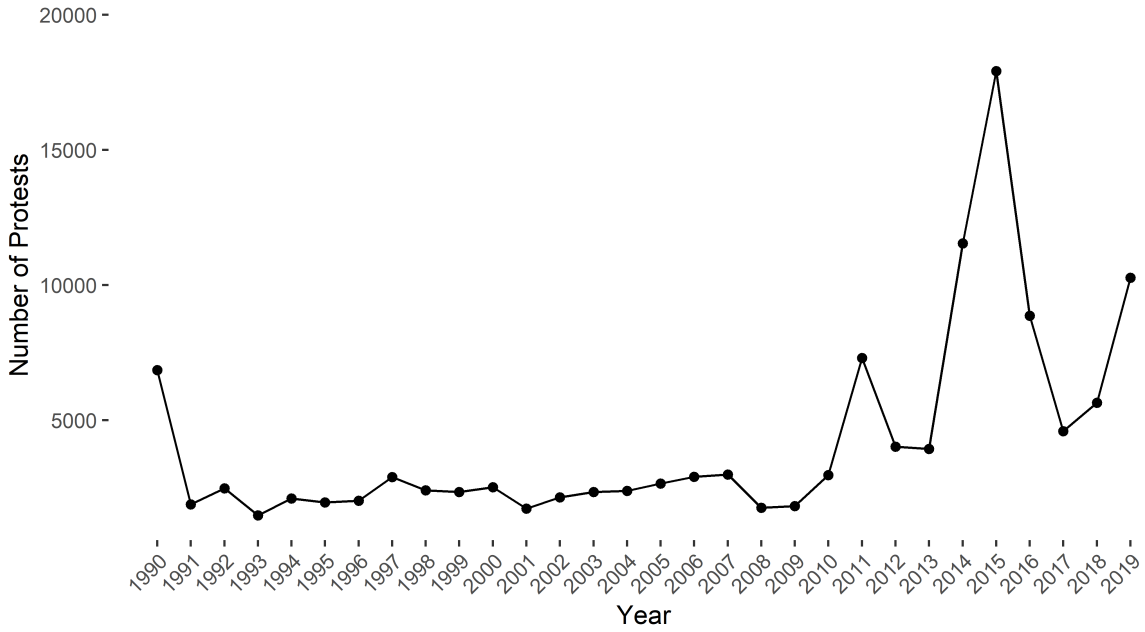
	Model 1	Model 2	Model 3
Shootings_{t-1}	-0.072***		
	(0.025)		
Beatings_{t-1}	-0.031		
	(0.042)		
Arrests_{t-1}	-0.133***		
	(0.044)		
$\text{Crowd Control}_{t-1}$	0.098**		
	(0.039)		
Evaluation Carabineros	-0.613***	-0.615***	-0.614***
	(0.024)	(0.024)	(0.024)
$\text{Police Per 100k}_{lag1}$	0.014		
	(0.017)		
$\text{Shootings}_{t-3\ acc}$		-0.030	
		(0.020)	
$\text{Beatings}_{t-3\ acc}$		-0.020	
		(0.043)	
$\text{Arrests}_{t-3\ acc}$		-0.083	
		(0.068)	
$\text{Crowd Control}_{t-3\ acc}$		0.136**	
		(0.067)	
$\text{Police Per 100k}_{t-3\ acc}$		0.003	
		(0.007)	
$\text{Shootings}_{t-7\ acc}$			-0.023
			(0.020)
$\text{Beatings}_{t-7\ acc}$			-0.001
			(0.019)
$\text{Arrests}_{t-7\ acc}$			-0.010
			(0.047)
$\text{Crowd Control}_{t-7\ acc}$			0.096
			(0.063)
$\text{Police Per 100k}_{t-7\ acc}$			0.004
			(0.007)
Num.Obs.	1385	1414	1414
R^2	0.462	0.459	0.458
R^2 Adj.	0.410	0.408	0.407
AIC	3570.0	3640.9	3642.2
BIC	4213.7	4287.2	4288.4
RMSE	0.80	0.80	0.80
SE	Municipality	Municipality	Municipality
FE Municipality	✓	✓	✓

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

E Additional Information

E.1 Mass Mobilization Data

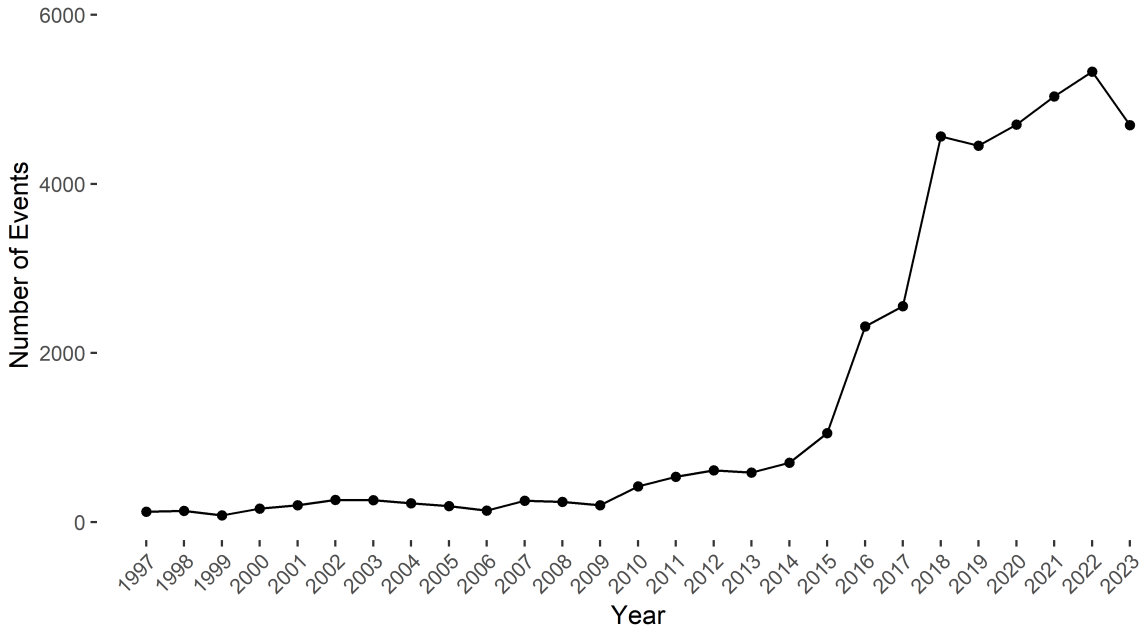
Figure E.1: Trends in Mass Mobilization per Year



Source: Mass Mobilization Data (Clark and Regan, 2016).

E.2 Violence Against Civilians

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



Source: ACLED.

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

	2019			
Regiones	**October**	**November**	**December**	**Total**
Arica y Parinacota	23847	19209	3412	46468
Tarapacá	26218	57882	5906	90006
Antofagasta	76487	63358	12265	152110
Atacama	23820	34885	4262	62967
Coquimbo	72269	78682	6121	157072
Valparaíso	124340	107465	14941	246746
Metropolitana	2106645	547838	116161	2770644
Lib. Bdo. O´Higgins	59047	52665	5979	117691
Maule	119021	89251	10981	219253
Ñuble	101162	28362	1135	130659
Bio Bío	183230	120513	23223	326966
Araucanía	70202	71686	5226	147114
Los Ríos	107165	59683	6410	173258
Los Lagos	89505	100221	9975	199701
Aysén	12285	23712	1105	37102
Magallanes	33698	27005	2830	63533
Total	3228941	1482417	229932	4941290

References

CEP (2019). *Estudio Nacional de Opinión Pública N°84, Diciembre 2019*. URL: https://www.cepchile.cl/encuesta/estudio-nacional-de-opinion-publica-n84-diciembre-2019-2/.

Clark, David and Patrick Regan (2016). *Mass Mobilization Protest Data*. Version V5. URL: https://doi.org/10.7910/DVN/HTTWYL.

INDH (Dec. 2019). *Informe Anual 2019: Situación de los Derechos Humanos en Chile en el Contexto de la Crisis Social*. URL: https://bibliotecadigital.indh.cl/handle/123456789/1701 (visited on 03/03/2022).

— (2020). *Mapa de violaciones a los derechos humanos*. URL: https://mapaviolacionesddhh.indh.cl/public/investigadores (visited on 03/03/2022).