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How Local Regime Type Shapes Political Expression: Self-Censorship in Argentina's Subnational Units

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How Local Regime Type Shapes Political Expression: Self-Censorship in Argentina's
Subnational Units

A Thesis Presented

by

SABRINA VICTORIA CORBACHO

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ABSTRACT

HOW LOCAL REGIME TYPE SHAPES POLITICAL EXPRESSION: SELF-CENSORSHIP IN ARGENTINA'S SUBNATIONAL UNITS

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This thesis examines how subnational democratic contexts shape political self-censorship in Argentina. Using data from the 2017 World Values Survey and Gervasoni's Subnational Democracy Index, it analyzes whether variations in provincial democratic quality are associated with citizens' willingness to express political opinions. Self-censorship is operationalized through both direct measures of political conversation and indirect indicators based on item nonresponse to sensitive political questions. Employing multilevel regression models that account for individual- and provincial-level factors, the analysis shows that higher levels of subnational democratic quality are associated with lower levels of self-censorship. These relationships persist after controlling for political interest, civic engagement, and sociodemographic characteristics, indicating that democratic context exercises an independent effect on expressive behavior. The findings suggest that uneven democratic practices within a nationally democratic regime shape citizens' perceptions of expressive risk, contributing to patterns of self-censorship in hybrid subnational contexts. By focusing on within-country variation, this study contributes to the literature on self-censorship by showing how subnational differences in

democratic quality shape individual-level political expression within a nationally democratic regime.

Keywords: self-censorship, subnational democracy, hybrid regimes, Argentina, Latin America

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CHAPTER 1

INTRODUCTION

Self-censorship has been widely studied in comparative politics and political communication, particularly in the context of authoritarian regimes. In these settings, restrictions on political expression are often understood as the consequence of overt repression, surveillance, or formal constraints on speech. In contrast, far less attention has been paid to self-censorship in democratic or hybrid contexts, especially in Latin America. In the region, censorship and silencing are commonly associated with the legacy of military dictatorships and episodes of authoritarian rule during the twentieth century, leaving everyday forms of expressive restraint under democracy comparatively understudied.

This gap is especially important because political expression does not depend solely on national regime type. Individuals form perceptions about political risk, social sanction, and the acceptability of expressing political views within their immediate environments. These perceptions are shaped by local political conditions, which may vary substantially within the same country. Even in nationally democratic systems, uneven enforcement of democratic rules, informal elite dominance, and localized power structures can generate contexts in which political expression is constrained. Understanding self-censorship therefore requires moving beyond national-level classifications and examining how subnational political environments shape expressive behavior at an individual level.

The study of self-censorship is closely connected to broader theories of public opinion. A foundational contribution is Noelle-Neumann's (1974) spiral of silence theory,

which emphasizes how individuals' willingness to express opinions depends on their perceptions of dominant views and the risk of social isolation. According to this perspective, public opinion consists of views that can be expressed without fear of sanction, while other perspectives remain hidden as individuals refrain from expressing them. Noelle-Neumann's empirical work further demonstrated that expressive behavior varies systematically across social groups, underscoring the role of demographic and contextual factors in shaping political speech.

More recent scholarship has refined this approach by focusing explicitly on self-censorship as an individual-level expressive behavior shaped by social context. Following Hayes et al. (2005), this thesis conceptualizes self-censorship as the withholding of one's true opinion from an audience perceived to disagree with that opinion. While self-censorship is theorized as a probability ranging from full expressive openness to partial or complete restraint, it is empirically observed through discrete behavioral decisions. Accordingly, this study operationalizes self-censorship using binary indicators that capture whether individuals cross specific thresholds of expressive restraint, such as avoiding political discussion or withholding responses to sensitive political questions. These behaviors may occur even in the absence of formal repression, as individuals' expressive decisions are shaped by perceived political risk, social consequences, and local contextual cues.

Importantly, these perceptions are likely to vary across subnational contexts. Building on the literature on subnational authoritarianism and subnational hybrid regime, this thesis adopts a territorial perspective on democratic quality. Scholars such as Gibson (2005) argue that the uneven territorial distribution of democratic practices is a defining

feature of many democracies, including both developing countries and established democratic systems. Subnational political environments may combine democratic and non-democratic practices in ways that meaningfully affect citizens' behavior. In such contexts, self-censorship may emerge as a rational and adaptive response to local conditions, even when national-level institutions are formally democratic.

Empirically, this study focuses on Argentina, a country widely classified as democratic but characterized by substantial variation in democratic quality across provinces. To capture this variation, the analysis combines individual-level data from the World Values Survey (Wave 7, 2017) with the Subnational Democracy Index (SDI) developed by Gervasoni (2018). This design allows for a disaggregated examination of political expression and self-censorship across provinces within a shared national institutional framework.

The central question guiding this research is whether subnational democratic context shapes individuals' willingness to express political opinions. Specifically, the thesis asks whether individuals living in less democratic provinces are more likely to engage in political self-censorship than those living in more democratic subnational contexts. By focusing on within-country variation, the analysis isolates the role of local democratic conditions in shaping expressive behavior while holding national-level factors constant.

To address this question, the study operationalizes self-censorship using two complementary measures. The first captures reluctance to engage in political discussion with friends, reflecting everyday interpersonal political expression. The second relies on patterns of non-response to sensitive political survey items, capturing a behavioral

manifestation of expressive restraint. These outcomes are analyzed using multilevel modeling techniques that account for both individual-level characteristics—such as political interest, civic involvement, media exposure, and demographics—and provincial-level variation in democratic quality.

The findings show that subnational democratic context is a significant predictor of political self-censorship. Individuals living in provinces with higher levels of democratic quality are consistently less likely to self-censor, both in their willingness to discuss politics with friends and in their likelihood of withholding responses to sensitive political questions. These relationships remain robust after accounting for a wide range of individual-level controls, suggesting that local political environments shape expressive behavior independently of individual predispositions.

By examining self-censorship from a subnational perspective, this thesis makes several contributions. First, it extends the literature on self-censorship by demonstrating that expressive restraint is not limited to authoritarian regimes but is also shaped by subnational variation in democratic quality within democracies. Second, it contributes to research on subnational democracy by linking institutional and contextual differences to micro-level political behavior. Third, by focusing on Argentina, the study adds to the relatively limited literature on self-censorship in Latin America and highlights the importance of incorporating subnational perspectives when studying political expression in the region.

The remainder of the thesis is organized as follows. Chapter 2 reviews the literature on self-censorship, public opinion, and hybrid regimes. Chapter 3 presents the theoretical framework and outlines expectations linking subnational democratic context

to self-censorship. Chapter 4 describes the data, measurement strategies, and methodological approach. Chapter 5 presents the empirical findings, and Chapter 6 discusses their implications for theories of self-censorship, subnational democracy, and political expression, concluding with directions for future research.

CHAPTER 2

LITERATURE REVIEW

2.1 Theoretical Origins from a Public Opinion perspective

Defining self-censorship as a concept is closely attached to the methods each scholar has used to measure it. Since it is a social psychological phenomenon, with its intrinsic subjectivity, the challenge of finding the correct representation of it has been largely discussed by researchers. The main method used to measure it has been through survey research, testing people's willingness to express their opinions or to suppress them in fear of not to be isolated from the social environment surrounding them. The definition of self-censorship and distinguishing it from other behaviors has been different throughout the scholars. This section will focus on providing the foundational explanations related to self-censorship.

Noelle-Neumann's (1974) theory of the spiral of silence suggests that individuals refrain from expressing opposing views in general to avoid social criticism. A spiraling process begins when the person that thinks has the prevailing opinion expresses it more and more leaving out the ones that think are in the unpopular side of the opinion. In this way, the fear of isolation drives individuals to move to the popular opinion although it might not be the one that they are truly thinking.

Another aspect highlighted by the author is that what people think is the popular opinion might not be necessarily the truth. Since humans understand the world under their personal perceptions, the leading opinion might be the one they believe silently. This is how the minority ends up leading the public opinion discourse, when a silent majority adapts its own views to avoid isolation.

Noelle-Neumann tested five hypotheses conducting a multi-subject survey carried out by the Institut für Demoskopie Allensbach between 1971 and 1972 and performing 1,000 and 2,000 structured interviews in Germany. Several controversial questions have been made to the participants that related to topics such as abortion, recognition of the GDR, unmarried couples living together, etc. The results showed differences in discussing certain topics in public after age, sex, occupation, income and residence. Men, younger people and middle and upper classes were more open to speak up in public holding everything else constant. Another result proved the presence of an existing “silent majority”, where the majority was thinking that they were the minority. Finally, the interest in politics also was important when analyzing the tendency to talk about the winning faction vs the losing faction. In both groups, the more interested ones were more prone to speak.

While the fear of isolation constitutes the motivational basis of the spiral of silence, self-censorship represents its behavioral manifestation. In this sense, self-censorship is a psychological and social behavior related to the adaptive response of individuals to live and coexist in society, to be part of a broader community and to avoid a perceived isolation. This contextual factor is also important, since the fear of isolation is a perception of the context and opinions. Perception of the majority opinion is socially constructed through interpersonal cues and media exposure.

The author also included at that time the mass-media dimension. Today, the same evaluative process extends to social media, where algorithmic curation reinforces perceived majorities. Noelle-Neumann (1974) explains that mass-media is part of the mechanisms that a person uses to measure their own position towards a topic within a

group. The media in all its forms can contribute to “create the environmental pressure to which people respond with alacrity, acquiescence, or silence” (p. 51).

Later work written by Hayes et al. (2005), advanced the definition of self-censorship to denote the conscious withholding of opinions in disagreement-prone environments. They define self-censorship as a construct performed by individuals when withholding their own true opinion from an audience perceived to disagree with that opinion by creating a measurement to assess people’s willingness to self-censor. The authors emphasize the clear influence of different factors on the act of self-censoring. However, their definition focuses on analyzing the construct and the self-censoring behavior over analyzing psychological or other motivations possibly affecting.

Another factor revealed by Hayes et al. (2005) and first mentioned by Noelle-Neumann (1974) is that people dislike isolation at a social and political level. They both agree that individuals in specific social settings may opt to not speak out and be silent instead of expressing a true opinion and in this way avoid the possible resulting discomfort. This is different from conformity, where a person expresses a different opinion in public that contradicts the one’s own opinion (Hayes et al., 2005). The lack of expression of own ideas is possible since the person decides to silence their opinion and not always is forced to take a position. In public opinion polls, the possibility of answering “Don’t know” or “Not answer” can reflect this behavior.

The authors constructed a measurement tool for public opinion research based on a willingness to self-censor scale (WTSC). The measure was built up over eight questions asking the participants different aspects of the self-censoring behavior in themselves. The scale was created with the questions and analyzed with factor analysis and correlated to

similar measures in social psychology that measure aspects such as conformity, shyness, etc.

Hayes et al. (2005) conducted a survey among six different samples with the WTSC scale. The first two were student samples from US undergraduate students at two different universities. The next four were two university student samples and two US national representative samples, to test validity. The results show that people self-censoring tend to be shy, socially anxious and low in self-esteem. These types of personalities have concerns about being socially rejected and avoid argumentative exchanges or debates with others.

In a second work, Hayes et. al. (2006) measured the nonparticipation of individuals in political related activities that are more public than voting and correlated it with self-censorship. The survey had 37 questions in total asked to a U.S. representative sample, where 8 items are part of the WTSC scale as main independent variable. The rest of the items asked were related to publicly observable political activities and used as outcome variables. These activities do not include the voting behavior, since it is one of the remaining private behaviors where people are not self-censoring due to the lack of social scrutiny (Hayes et al, 2006).

The avoidance of participating in such activities can be affected not only by psychological factors but by people perceiving a risk associated with that act. When dealing with political issues, the disagreement can be higher. Hayes et. al (2006) assume that the hostile public opinion environment can lead to nonparticipation. In this sense, polarization can be an explanation of that unkind context.

After controlling for standard demographic variables and political orientation variables, Hayes et. al. (2006) conducts a partial negative binomial regression estimating political activity from each of the predictor variables. They find out a high correlation between avoidance to participate and self-censoring. This is also even higher when people perceive that their environment will disagree. Participation increases the likelihood of becoming involved in some kind of conflict or argument with others, and therefore nonparticipation seems a better option (Hayes et. al. 2006).

Further qualitative research conducted by Ho (2008) among transnational migrants from Singapore in London, United Kingdom, defines self-censorship as “conscious and unconscious acts of omission in response to perceived or real threats” (p. 492). In line with the perception factor highlighted by Noelle-Neumann (1974) and Hayes et. al. (2005), Ho analyzes self-censorship in the lights of the relations between the state and its citizens. The author refers to self-censorship as the non-verbal responses given by participants in individual interviews when asking sensitive questions related to the Singapore government. Under her definition, “it is a socially constructed reaction towards threats that are usually not explicitly identifiable” (Ho, 2008, p. 493).

The self-censorship has also been explored from the social psychological perspectives (Bar-Tal, 2017), and normative political theory frameworks (Horton, 2011; Cook and Heilmann, 2013). From the social psychological perspective, the authors define the concept “as an act of intentionally and voluntarily withholding information from others in the absence of formal obstacles” (Bar-Tal, 2017, p. 1). The author frames the research under the scope of the withholding of information that can directly impact a development of a specific organization, specially under the democratic perspective. This

analysis makes the emphasis on understanding self-censorship from a societal perspective, where influential policy makers, politicians and leader withhold presumed to be sensitive information in favor of not causing more harm. However, the author discusses this point by exemplifying with different international and political conflict situations why at the end retaining that information might not benefit democratic development and the evolve of free societies.

From the normative interpretation of the concept, there is a need of the different authors to make a clear differentiation of self-censorship from censorship (Horton, 2011; Cook and Heilmann, 2013). The identification of self-censorship is based on the idea that the own person is the one self-censoring and that in the censorship case an external entity is restricting the freedom of speech. However, Horton (2011) discusses that self-censorship may be reduced to only an additional expression of censorship, but in this case performed by the own individuals will. The author also explores that “it seems important that if we are to talk of self-censorship then the will of the censoring self should have some significant non-coerced determinative role in the action” (Horton 2011, p. 98).

Horton (2011) as well as Cook and Heilmann (2013) agree in analyzing self-censorship as an ambivalent concept. For Horton (2011), the ambivalence rests in the fact that the self-censor can be seen as author or as instrument. When the emphasis is placed on authorship, self-censorship appears as a freely chosen form of self-restraint; when the self-censor is understood as an instrument, it is instead conceptualized as a specific variant of conventional censorship. In the case of Cook and Heilmann (2013), they understand that self-censorship has two forms: public and private. The authors ask a rhetorical question: “does self-censorship always require a censoring agent that exists

independently of the censee?” (p. 178). This follows the line of Horton (2013) and argues that public self-censorship “refers to a range of individual reactions to a public censorship regime.” (p. 179) On the side of private self-censorship, it alludes to “the suppression by an agent of his or her own attitudes where a public censor is either absent or irrelevant.” (p. 179).

Finally, the distinction developed by Cook and Heilmann (2013) between public and private self-censorship complements the ideas discussed above. They argue that individuals often draw a line between what they are willing to express publicly and what they share in private settings. Public self-censorship involves deliberately withholding opinions in spaces where they may provoke sanction or disapproval—such as political discussions, demonstrations, or online forums. Private self-censorship, by contrast, reflects a deeper internalization of fear or conformity, where individuals suppress certain thoughts even in intimate or anonymous contexts.

2.2 Determinants of Self-Censorship

Self-censorship has been studied by different scholars within different types of political regimes. Studies span from analyzing self-censorship in the United States, Germany, Israel as well as in more authoritarian countries such as Singapore and China. This phenomenon is present across all political systems, since it is tied to individual behavior. However, as developed above, the need to self-censor is expected to be highly correlated with the social environment and the context perceived by the person. Therefore, this section will be divided into literature that analyzes self-censorship in more democratic contexts and the ones in more authoritarian contexts.

Nonetheless, some determinants are common to every context and the output varies depending on the context. Empirical research shows that demographics—age, gender, and class—also influence one’s willingness to speak out (Noelle-Neumann, 1974). Noelle-Neumann suggests in her work that people are constantly evaluating others. They continuously adjust their perceptions to the perceived majority in which they find themselves.

2.2.1 Democratic Context

When it comes to understand the determinants of self-censorship in a democratic context, authors suggest that this behavior has been increasing in the last decades and that it mainly has to do with political polarization (Hayes et. al. 2006; Gibson and Sutherland, 2023; Burnett et. al., 2022). The main studies conducted in the last twenty years were in the United States and showed offline or online, that people feel less comfortable speaking out about politics.

Although democracies lack the overt coercive mechanisms characteristic of authoritarian regimes, citizens nevertheless frequently choose to withhold their political opinions. Research in public opinion, political communication, and political psychology demonstrates that self-censorship in democratic settings is driven not by formal repression, but by a constellation of social, psychological, issue-specific, informational, and normative factors. This section synthesizes insights from Gibson and Sutherland (2023), Hayes et al. (2006), and Burnett et al. (2022) to present an integrated framework of democratic self-censorship.

2.2.1.1 Social pressure

One of the most powerful determinants of self-censorship in democracies is the perceived social environment. Individuals frequently silence their views when they believe they hold a minority position, a core mechanism of the Spiral of Silence. Burnett et al. (2022) show that people who perceive themselves as minority opinion holders—regardless of whether they truly are—report a higher likelihood of withholding their views. Their findings indicate that “those who perceive themselves as holding a minority viewpoint tend to self-censor,” particularly in online settings where expressive climates are ambiguous and rapidly shifting.

Gibson and Sutherland (2023) similarly argue that self-censorship is shaped less by macro-level political conditions and more by “micro-environment sentiments,” such as fear of alienating friends, family, neighbors, or colleagues. These interpersonal pressures intensify when individuals participate in heterogeneous social networks. Hayes et al. (2006) demonstrate that citizens refrain from publicly observable political activities when they expect disagreement in their immediate social circles. In all three studies, social pressure emerges as a central democratic determinant: individuals withdraw speech not to avoid punishment from the state, but to protect social relationships, avoid judgment, and prevent interpersonal conflict.

A distinctive pattern identified by Burnett et al. (2022) is the presence of a vocal, committed minority that dominates political expression on social media, producing what they call a “self-censoring majority.” This dynamic reinforces perceived minority status among moderates and contributes to widespread silence among otherwise mainstream opinion holders.

2.2.1.2 Psychological Dispositions

Self-censorship in democratic contexts is also shaped by psychological orientations that influence how individuals perceive and respond to social risks. A key disposition is the fear of isolation (FOI)—the concern that expressing unpopular viewpoints will result in social exclusion. Although Burnett et al. (2022) find variation in FOI across political subgroups, they confirm that FOI “could already be present to allow people to self-censor,” especially among moderates and groups with weaker ideological commitment (Burnett et al., 2022, p. 9).

Identity-based expressive vulnerability is another important psychological determinant. Burnett et al. (2022) show that political identity, more than ideology, predicts expressive caution; individuals who perceive threats to their political identity are more likely to silence themselves. By contrast, strongly identified liberals and conservatives tend to speak more freely, as they are normatively insulated within their ideological communities. Hayes et al. (2006) provide complementary evidence: individuals with higher conflict avoidance, lower expressive confidence, or greater concern about social evaluation are more likely to refrain from public political activity. Gibson and Sutherland (2023) find a strong relationship between ideological self-identification and self-censorship, with conservatives reporting higher levels of perceived expressive constraint. Together, these findings demonstrate that psychological motivations—particularly fear, identity threat, and conflict avoidance—play a decisive role in shaping expressive behavior.

2.2.1.3 Topic Sensitivity

Not all issues are equally “safe” to express in democratic public spheres. All three studies emphasize that topic sensitivity influences willingness to speak, particularly when issues are moralized, polarized, or identity relevant. Burnett et al. (2022) find that moderates are especially likely to self-censor on divisive political topics, while strongly ideological individuals are more willing to participate in conflictual discourse. Gibson and Sutherland (2023) note that conservatives disproportionately self-censor on issues involving race, gender, sexuality, and other culturally charged domains. Hayes et al. further show that citizens avoid public political acts—such as protest, contacting officials, or speaking publicly—when such activities are seen as contentious or socially risky. Issue sensitivity thus acts as an important filter: when discussing polarized or morally salient issues, individuals become acutely aware of potential social costs and adjust their expressive behaviors accordingly.

2.2.1.4 Media and Information Environment

The media environment in which individuals are embedded substantially shapes their expressive decisions. Gibson and Sutherland (2023) document a striking correlation between long-term rising affective polarization and increased self-censorship, showing that as politics becomes more conflictual, citizens perceive greater expressive risk (correlation with ideological polarization $r = .91$). Burnett et al. (2022) highlight another mechanism: online information environments amplify extreme voices, enabling a vocal minority to dominate discourse and creating the perception that certain viewpoints are unsafe to express. Their findings indicate that social media transforms the spiral of

silence by accelerating perception gaps—users infer majority opinion from the loudest voices, not the actual distribution of beliefs.

Hayes et al. (2006) add that media framing, exposure to conflictual political news, and the visibility of disagreement all heighten perceptions of hostility, prompting individuals to retreat from public expression. Homophily and selective exposure to partisan media reinforce these effects, as individuals interpret expressive norms through the lens of ideologically filtered information. Together, these studies show that self-censorship in democracies is shaped by an informational environment characterized by polarization, asymmetries in voice, and distorted perceptions of public opinion.

2.2.1.5 Democratic Norms and civility

Finally, democratic norms and expectations of civility influence expressive behavior. Contrary to theories that attribute silence to declining tolerance or rising illiberalism, Gibson and Sutherland (2023) find no strong relationship between macro-level political intolerance and self-censorship. Instead, they argue that individuals censor themselves because of increasing incivility and the fear of violating normative expectations of politeness or political correctness. These pressures are especially acute for groups that perceive themselves as socially vulnerable or ideologically outnumbered.

Burnett et al. (2022) show that FOI varies systematically across political typology groups. Certain groups—such as “Opportunity Democrats” or “Devout and Diverse”—exhibit higher FOI, indicating greater sensitivity to expressive norms. Strong liberals and core conservatives, by contrast, demonstrate low FOI because they perceive themselves as normatively protected within their communities.

Hayes et al. (2006) argue that citizens also self-censor to preserve social harmony, especially in settings where political discussion is viewed as impolite or inappropriate. In such contexts, silence functions as a socially adaptive behavior rather than a politically coerced one.

2.2.2 Non-Democratic Context

Self-censorship in non-democratic and hybrid political systems differs fundamentally from the dynamics observed in democratic contexts. Whereas democratic self-censorship emerges from concerns about social disapproval or interpersonal conflict, self-censorship in authoritarian and hybrid regimes is rooted in anticipated political risk, discretionary state power, media control, and institutional uncertainty. In these settings, silence becomes a strategic and often rational response to environments where the boundaries of permissible speech are ambiguous and where political expression—especially criticism—can have personal, social, or material consequences.

2.2.2.1 Perceived Political Risk

Shen and Truex (2021) show that authoritarian citizens view political expression as a high-risk activity, avoiding responses to regime-evaluation questions because they understand these as potentially dangerous acts. Citizens in such systems censor themselves not only when confronted with direct state surveillance but also when they imagine or anticipate that their responses might be monitored. Robinson and Tannenbergh (2018) similarly argue that the fear that survey answers may be observable leads individuals to inflate their support for the government or to avoid answering political questions altogether. This sense of political danger is not confined to physical territory: Ho's (2008) ethnographic work captures how Singaporean transmigrants living abroad

continue to self-censor because they perceive state power as extending beyond national borders. Respondents in her study regularly limited their political speech, expressed nervousness, or qualified their statements because they feared that articulating dissatisfaction with the government remained unsafe even when physically outside Singapore. In these cases, political risk becomes internalized, shaping expressive behavior in both formal and informal settings.

2.2.2.2 Informal Repression and Discretionary Power

Closely related is the role of informal repression and discretionary state power, which produces an environment where individuals censor themselves long before the state needs to intervene. Shen and Truex emphasize that self-censorship is often anticipatory: individuals silence their views in the absence of actual repression simply because the threat of punishment—ambiguous, unpredictable, and difficult to measure—is sufficient. Pang (2008) documents similar dynamics in Chinese online communities, where vague rules and inconsistent moderation generate a climate of uncertainty that encourages users to avoid political discussion altogether. Ho's interviews with Singaporeans similarly reveal widespread hesitation, nervous laughter, qualified statements, and guardedness whenever political topics arise. Her respondents frequently asked whether she was affiliated with the government, signaling that political expression is governed not only by explicit rules but also by fears of informal surveillance and discretionary government oversight. Such concerns illustrate how authoritarian power is experienced in the everyday: individuals regulate their speech not because they are directly punished, but because the opaque nature of state authority leads them to err on the side of caution.

2.2.2.3 Media Capture and Information Monopoly

Another critical factor is media capture and information monopoly, which shape citizens' perceptions of what is safe to express. Shen and Truex (2021) show that authoritarian regimes' dominance over the public communications sphere signals the boundaries of acceptable discourse and increases self-censorship on politically sensitive topics. Robinson and Tannenber (2018) emphasize that state control of information fosters the belief that support for the regime is the only safe position, distorting not only private attitudes but also public expression. Pang (2008) demonstrates how Chinese online platforms operate within architecture explicitly designed to limit dissent, pushing users toward political silence. Ho's case of Singapore demonstrates a hybrid version of this phenomenon: although formally democratic, the country's heavily regulated media and history of punitive responses to political criticism have produced a citizenry that views political debate as risky. She notes that Singaporeans routinely approach political topics with caution because the "uncertain boundaries of freedom of speech" make discussing governance "an extremely risky and unpredictable business". Media capture thus shapes both perception and practice, reinforcing silence even without visible repression.

2.2.2.4 Institutional Weakness

Weak institutions amplify self-censorship by reducing citizens' confidence in legal protections. Shen and Truex (2021) stress that institutional uncertainty—the inability to predict judicial, administrative, or police behavior—creates incentives to avoid politically risky speech altogether. Robinson and Tannenber (2018) show that self-censorship is strongest where courts are weak, oversight is minimal, and security forces have broad

autonomy. In such environments, individuals believe that the state may act arbitrarily. Pang (2008) notes that online users internalize institutional weakness through the unpredictable enforcement of cyber regulations and the absence of clear legal protections for digital expression. Taken together, institutional fragility—rather than overt repression—often generates the highest levels of self-censorship, because individuals must assume the worst-case scenario.

2.2.2.5 Dependency on Local Government

Dependence on state capacity and state-controlled resources further intensifies self-censorship in authoritarian and hybrid settings. Robinson and Tannenber (2018) show that self-censorship is highest where the state has strong surveillance capacity, since individuals recognize that their social, economic, or political wellbeing may depend on remaining in good standing with authorities. Pang's (2008) ethnography reveals that participation in state-managed online environments heightens the sense of dependence, as users are aware that the platforms themselves are surveilled. Ho (2008) similarly finds that Singaporeans—even outside Singapore—carry with them the belief that their ties to the state and its bureaucratic apparatus constrain what can be safely said about citizenship or governance. In these cases, silence becomes a strategy for preserving access to opportunities, avoiding bureaucratic complications, and maintaining social belonging within state-linked networks.

2.2.2.6 High-Stakes Political Topics

Finally, self-censorship in authoritarian and hybrid regimes is shaped by high-stakes political topics. Shen and Truex (2021) observe that item nonresponse increases dramatically on questions regarding government performance, democracy, and human

rights—precisely the topics most likely to provoke state retaliation. Robinson and Tannenber (2018) find similar distortions on politically consequential items, such as evaluations of leaders or attitudes toward protest. Pang (2008) describes avoidance of dissent-related discussion in digital spaces when topics involve criticism of authorities or collective action. Ho's (2008) respondents, too, demonstrate selective silence: while they spoke openly about migration or everyday life, they routinely grew reticent when asked about citizenship, governance, or their relationship to the Singaporean state. Many attempted to appear politically neutral, laughed nervously, or shifted topics—signaling that these issues carried elevated risk and demanded caution.

2.3 Hybrid Regimes and Subnational Hybrid Regimes

Scholarship on hybrid regimes has traditionally focused on national-level cases, examining how formal democratic institutions coexist with authoritarian practices. Levitsky and Way's (2010) theory of competitive authoritarianism provides the foundational framework for this literature, demonstrating that regimes can retain elections, opposition parties, and constitutional procedures while simultaneously manipulating media, courts, and state resources to ensure incumbent advantage. In competitive authoritarian systems, opposition actors face barriers to media access, legal protections are selectively applied, and state institutions are instrumentalized for political ends. Although their analysis is situated at the national level, the mechanisms they identify—informal coercion, politicized bureaucracies, and uneven access to resources—apply directly to subnational contexts within formally democratic states. Importantly, these mechanisms shape not only elite competition but also the perceived risks ordinary

citizens associate with political expression, making competitive authoritarianism a useful baseline for thinking about expressive behavior in hybrid environments.

This insight is especially relevant for Latin America, where national democratic transitions did not eliminate authoritarian enclaves at the provincial or local level. Gibson's (2005) work is foundational in this regard: he identifies subnational authoritarianism as a phenomenon in which provincial political systems exhibit authoritarian characteristics despite democratic national institutions. Central to his argument is the concept of boundary control, a theoretical framework describing how governors and local elites in federal democracies insulate their territories from national intervention and restrict the penetration of external political actors. Boundary control enables provincial incumbents to maintain hegemonic rule by containing conflict within local arenas, preventing nationalization of provincial disputes, and limiting the mobility of opposition actors. As Gibson explains, "continuity or change in subnational authoritarianism is driven not by local causes alone but also by interactions between provincial politics and the national territorial system in which they are embedded" (Gibson, 2005, p. 103). While Gibson's (2005) analysis focuses primarily on elite strategies, the closed and asymmetric political environments produced by boundary control also shape citizens' everyday perceptions of safety, pluralism, and expressive risk—conditions that plausibly affect whether individuals choose to voice or withhold political opinions.

Gervasoni (2018) further develops the logic of subnational hybridity through his analysis of fiscal federalism and the emergence of subnational rentier states. He demonstrates that Argentine provinces vary considerably in their level of democratic

quality, a variation driven largely by differences in fiscal autonomy. Provinces that rely heavily on federal transfers have weaker mechanisms of accountability: incumbents in these provinces face fewer electoral constraints, enjoy greater discretion in allocating public employment and resources, and can employ both formal and informal tools to maintain political dominance. As Gervasoni writes, “Subnational regimes vary from fully democratic to clearly authoritarian, depending on the level of fiscal autonomy and the incentives for accountability” (2018, p. 304). These institutional configurations generate hybrid political environments in which formal democratic rights coexist with informal pressures, clientelism, and unequal enforcement—conditions that may not fully suppress expression, but nonetheless incentivize caution and selective silence.

Taken together, this literature reveals that Argentina’s provinces do not share a uniform democratic climate. Rather, the country displays a mosaic of political environments ranging from robustly democratic to deeply hybrid or semi-authoritarian. In provinces where opposition parties lack access to media, where local elites control public employment, or where institutional oversight is weak, citizens may perceive higher risks associated with expressing dissenting opinions. Crucially, these subnational hybrid regimes may combine logics of self-censorship commonly associated with authoritarian settings (fear of retaliation, dependence on the state) with those more typical of democratic contexts (social conflict, polarization, and reputational concerns). This combination suggests that silence in hybrid provinces may operate differently than in either fully democratic or fully authoritarian environments.

Finally, although this thesis does not undertake a full empirical analysis of polarization, it is important to distinguish subnational hybrid dynamics from expressive

patterns in more democratic provinces. In pluralistic provincial contexts—those with competitive elections, plural media, and stronger horizontal accountability—expressive behaviors may be shaped more by ideological polarization and social conflict than by fear of political retaliation. Highlighting this distinction underscores a gap in the existing literature: while scholars have extensively documented subnational regime variation, far less attention has been paid to how these hybrid political environments translate into differences in individual-level expressive behavior, particularly self-censorship.

In sum, the literature on competitive authoritarianism, boundary control, and subnational rentierism provides a theoretical foundation for understanding the uneven territorial distribution of democratic quality in Argentina. What remains underexplored is how these subnational hybrid regimes shape citizens' willingness to speak, remain silent, or selectively withhold opinions. This thesis addresses this gap by linking provincial-level regime characteristics to individual patterns of political self-censorship, a task taken up explicitly in the theory section that follows.

CHAPTER 3

THEORETICAL FRAMEWORK

3.1 Conceptual Clarification: What Self-Censorship Is and Is Not

Defining what is meant by self-censorship—and what falls outside this definition—is not straightforward, particularly given that self-censorship operates as a largely non-verbal and internal psychological process. As discussed in the previous chapter, scholarship has approached self-censorship from multiple disciplinary perspectives. This thesis adopts a public opinion perspective, while also drawing selectively on philosophical and normative theories to clarify conceptual boundaries and distinguish self-censorship from related phenomena. This broader engagement underscores that self-censorship is not confined to a single field but constitutes a shared analytical concern across disciplines.

Philosophical and social psychological traditions have paid particular attention to the distinction between self-censorship and censorship. Both involve the withholding of one's true opinion (Hayes, 2005), yet they differ in the source of constraint. Self-censorship originates within the individual and is strongly shaped by perceptions of the surrounding social and political environment (Noelle-Neumann, 1974), whereas censorship refers to restrictions imposed by formal, institutionally established external actors that prevent the expression or circulation of information (Bar-Tal, 2017). The defining feature of self-censorship, therefore, lies not in the absence of constraint, but in the internalization of anticipated costs associated with expression.

In this thesis, self-censorship is understood as the intentional withholding of political expression based on individuals' perceptions of their social and political

environment. Just as political regimes range from fully democratic to fully authoritarian, the incentives and constraints shaping expressive behavior vary in degree. Subnational hybrid regimes occupy an intermediate position in which democratic and authoritarian practices coexist, producing uncertainty about the boundaries of acceptable speech. Because individuals act on their perceptions of risk, disagreement, and potential consequences, this ambiguity heightens caution and encourages self-censorship. In such contexts, silence becomes a rational response to unclear and unevenly enforced expressive norms, making hybrid environments especially conducive to self-censoring behavior.

Significantly, this uncertainty does not eliminate democratic forms of expression, nor does it replicate fully authoritarian repression. Instead, hybrid contexts allow multiple logics of self-censorship to coexist.

3.2 Analytical Lens: Public Opinion Perspective on Self-Censorship

Building on the public opinion literature, this thesis applies the logic of self-censorship to subnational variation, arguing that citizens living in less democratic provinces may refrain from political expression not solely due to explicit repression, but because of perceived social and political costs. From this perspective, self-censorship is defined as “the withholding of one’s true opinion from an audience perceived to disagree with that opinion” (Hayes et al., 2005, p. 299). The emphasis on audience perception is central, as it highlights how expressive behavior depends on individuals’ interpretations of their social and political surroundings.

While individual-level traits such as shyness, social anxiety, or concern with social evaluation help explain variation in self-censorship at the micro level (Hayes et al.,

2005), these characteristics alone cannot account for systematic differences across territorial contexts. Instead, contextual features—particularly perceived regime hostility and local political climates—shape aggregate patterns of silence. As Hayes et al. (2005) note, self-censurers tend to be more socially anxious and concerned with others' opinions, yet they also acknowledge that not all individuals respond to perceived isolation in the same way, and that some become accustomed to it (p. 303).

These insights are especially relevant for subnational analysis. In provinces characterized by smaller populations, dense social networks, and high visibility of political behavior, expressive acts are more easily observed and socially consequential. Even within a federal democracy such as Argentina, everyday political life often unfolds within local arenas, where social proximity and institutional dependence can heighten the perceived costs of speaking out. Consequently, self-censorship emerges not only from individual predispositions, but from the interaction between personal traits and locally embedded perceptions of risk.

In subnational hybrid regimes, the perceived audience is shaped not only by social disagreement but also by institutional arrangements that condition political exposure. Audience hostility may therefore reflect a combination of social disapproval and anticipated institutional consequences, blurring the boundary between interpersonal and political risk. Accordingly, self-censorship emerges not only from individual predispositions, but from the interaction between personal traits and locally embedded perceptions of risk.

Furthermore, because self-censorship is fundamentally a social phenomenon, it often manifests in everyday interpersonal interactions rather than through overt political

acts. From a public opinion perspective, informal discussions with friends and family constitute a key arena in which individuals negotiate the boundaries of acceptable expression. Choosing whether or not to talk about politics in such settings reflects assessments of social risk, fear of isolation, and anticipated disagreement. For this reason, interpersonal political discussion represents a theoretically meaningful domain in which self-censorship may emerge, particularly in contexts characterized by uncertainty or heightened expressive costs.

3.3 Why Self-Censorship Makes Sense in Hybrid Subnational Regimes in Argentina

From a comparative politics perspective, hybrid subnational regimes capture the uneven distribution of democratic quality within a formally democratic country. These regimes generate distinct climates of opinion and varying perceptions of political exposure. In provinces where incumbents exert stronger control over media, public employment, and patronage networks, citizens may internalize heightened caution when expressing political views.

I argue that subnational variation in political openness directly shapes individuals' propensity for self-censorship. Although self-censorship is partly rooted in psychological dispositions, it is strongly conditioned by context. Individuals may choose silence when they perceive their environment as hostile to dissent (Hayes et al., 2005), and such perceptions are particularly salient in some Argentine provinces, where democratic practices coexist with informal authoritarian mechanisms. In these settings, hostility is not only social but institutional: citizens internalize risks associated with patronage dependence, discretionary authority, and political surveillance (Gibson, 2005; Gervasoni, 2018).

The concept of “boundary control” helps clarify this process. While boundary control does not entail direct censorship, it produces closed political environments that limit pluralism and reduce incentives for free expression or participation. Provinces that are highly dependent on national transfers often resemble “subnational rentier states,” characterized by concentrated power and weak accountability. In such contexts, fiscal dependence increases governors’ leverage over local media and employment, heightening citizens’ perception of risk associated with voicing dissent (Gervasoni, 2018, p. 320).

Because self-censorship is fundamentally tied to perceptions of the audience, these local political climates matter greatly. Individuals assess the congruence between their own beliefs and their reading of their surroundings, and this assessment can yield different expressive outcomes even among otherwise similar individuals. When people self-censor in anticipation of external penalties—as is common in hybrid regimes—the private dimension of opinion formation becomes closely linked to institutional context. The more authoritarian or polarized the environment, the narrower the space for uninhibited expression, and the stronger the alignment between perceived external control and internal restraint. This dual logic helps explain how citizens in semi-democratic settings may comply outwardly while privately negotiating the limits of their own expression.

Subnational hybrid regimes therefore combine two distinct but overlapping logics of self-censorship. On the one hand, they reproduce mechanisms commonly associated with authoritarian settings, in which silence is driven by fear of retaliation, dependence on state-controlled resources, and uncertainty about the enforcement of formal rules. On the other hand, because democratic institutions and competitive politics formally persist,

these environments also sustain democratic mechanisms of self-censorship rooted in social disagreement, polarization, and reputational concerns. The coexistence of these logics distinguishes hybrid provinces from both fully democratic and fully authoritarian contexts and helps explain why self-censorship may take different forms across Argentina's subnational units.

Therefore, although this thesis uses variation in democraticness to theorize subnational hybridism. Provinces with lower levels of democratic quality are not fully authoritarian, but rather combine democratic institutions with authoritarian practices. Hybridism is therefore not treated as a separate empirical category, but as a theoretical lens for interpreting how mixed political environments shape expressive behavior. This approach allows the analysis to focus on how the coexistence of democratic and authoritarian elements—rather than regime type alone—conditions self-censorship.

3.4 Self-censorship in Democratic Contexts

Self-censorship is not confined to hybrid or authoritarian provinces. In more democratic subnational contexts, different mechanisms may also encourage silence. Over the past two decades, studies in the United States have documented a growing reluctance to speak openly about politics, despite strong formal protections of free expression. The spiral of silence operates across societies, as it is closely linked to individual psychological processes (Noelle-Neumann, 1974). However, contemporary research suggests that polarization has intensified these dynamics (Hayes et al., 2006; Burnett et al., 2022; Gibson and Sutherland, 2023).

Although polarization is difficult to measure precisely, it helps explain the discomfort individuals experience when encountering opposing political views. In

democratic provinces, this discomfort may be amplified by media environments that are formally free but socially fragmented. Social media and online networks can create echo chambers in which a vocal minority dominates discourse, leading others to misperceive majority opinion and remain silent to avoid isolation (Noelle-Neumann, 1974; Burnett et al., 2022).

Finally, perceptions of repression matter even in democratic settings. Gibson and Sutherland (2023) show that individuals who perceive their government as more repressive are significantly less likely to express their views publicly. This finding reinforces the broader claim that expressive behavior is shaped not only by formal regime type, but by individuals' perceptions of political risk and social consequences.

3.5 Self-censorship as Silence in Survey Response

Beyond overt expression, self-censorship can also manifest as silence within survey contexts. Recent work by Robinson and Tannenber (2018) and Shen and Truex (2021) demonstrates that nonresponse—particularly to questions concerning democratic quality, government performance, or rights—can reflect discomfort with expressing politically sensitive views. “Don’t know” and “no answer” (NA/DK) responses are therefore not merely missing data but may constitute meaningful indicators of attitudinal silence.

This form of self-censorship is especially likely when respondents distrust the anonymity of surveys or fear that expressing dissent could lead to surveillance or personal repercussions (Ho, 2008). In such cases, silence functions as a protective strategy, allowing individuals to navigate politically uncertain environments without openly revealing their views.

CHAPTER 4

DATA AND METHODOLOGY

4.1 Rationale for Data and Variable Selection

The selection of data sources and variables follows directly from the theoretical framework developed in Chapter 3 (Hayes et al., 2005; Noelle-Neumann, 1974; Shen and Truex, 2021). Because self-censorship is hard to observe directly and it is shaped by both individual perceptions and institutional environments, the study requires data that capture (a) individual expressive behaviors and (b) subnational political contexts that may condition these behaviors.

4.1.1 Data Selection: Why WVS and SDI

The World Values Survey Wave 7 (WVS7) is chosen because it contains the indicators needed to operationalize expressive behavior — political discussion, non-response to sensitive items, political interest, ideology, trust, and demographics. The WVS is widely used in public opinion research and reflects the behavioral mechanisms theorized in the spiral of silence tradition (Noelle-Neumann, 1974; Hayes et al., 2005).

The Subnational Democracy Index (SDI) is selected because it captures meaningful institutional variation across Argentina's provinces. As argued in the theoretical framework, hybrid subnational regimes shape perceived political risk and audience hostility (Gervasoni, 2018; Gibson, 2005). The SDI therefore provides a measure based on objective measurements to address subnational political context in the Argentine provinces needed to test how institutional environments influence expressive behavior.

The SDI is treated as a quasi-continuous province-level variable, capturing ordered gradations in democratic quality rather than discrete regime categories. Although the index is coded on a five-point scale, it reflects an underlying continuous concept of democraticness. This operationalization aligns with the theoretical framework, which conceptualizes democracy and hybridism as continua rather than dichotomous regime types.

4.1.2 Data Sources

The WVS Wave 7 (2017) provides nationally representative individual-level data collected through random probability sampling and face-to-face interviews (Inglehart et al., 2020). In Argentina, the 2017 survey includes respondents from 13 of the 24 provinces: Ciudad Autónoma de Buenos Aires, Buenos Aires, Catamarca, Chaco, Chubut, Córdoba, Corrientes, La Rioja, Mendoza, Salta, San Luis, Santa Fe, and Tucumán. The sampling frame included all localities and rural areas in the country, stratified by population size and region. Primary sampling units were selected using systematic random sampling from a cumulative population list, ensuring proportional representation across strata and a minimum of 20 interviews per locality. The City of Buenos Aires and the 24 districts of Greater Buenos Aires were included by design (World Values Survey Association, 2017). Although the sample does not cover all provinces, it includes provinces with different democratic settings, offering variation for examining subnational political climates.

The SDI measures the democratic quality of each Argentine province at the end of every gubernatorial term from 1987 to 2015 (Gervasoni, 2018). The index is based on five indicators, three of them based on electoral contestation and two based on power

concentration in the incumbent: executive contestation, legislative contestation, succession control, legislature control, and term limits.

For this study, the SDI is merged into the WVS dataset using provincial identifiers and used as a continuous Level-2 predictor.

4.1.3 Addressing the Temporal Mismatch Between SDI and WVS

A methodological challenge is that SDI values are last available for 2015, whereas WVS fieldwork in Argentina occurred in 2017. This two-year gap does not meaningfully compromise the analysis for the following reasons explained below.

First, subnational regime characteristics in Argentina are highly stable over time. Research shows that provincial institutional structures — including executive dominance, media capture, and patronage networks — change incrementally rather than abruptly (Gervasoni, 2018; Gibson, 2005). Second, triangulation with the Varieties of Democracy (V-Dem) dataset confirms minimal changes in provincial democratic quality between 2015 and 2017 (Coppedge et al., 2023). Third, provincial election reports from 2015–2017 indicate only modest political shifts, with most provinces maintaining stable electoral and institutional patterns. Fourth, self-censorship responds to enduring political climates, not short-term electoral fluctuations (Gibson and Sutherland, 2023; Robinson and Tannenbergh, 2018). The theoretical framework emphasizes that expressive avoidance is shaped by chronic perceptions of risk derived from stable institutional environments (Hayes et al., 2005; Noelle-Neumann, 1974). Thus, the temporal mismatch is unlikely to bias results but is acknowledged and interpreted cautiously.

4.1.4 Units of Analysis and Sample

The dataset contains adult respondents nested within Argentine provinces. The analyses include only individuals for whom both WVS data and provincial democratic scores are available. Observations missing on control variables are excluded via listwise deletion, while non-response to politically sensitive items is retained and modeled as a meaningful outcome (rather than coded as missing).

Because individuals are clustered within provinces, all statistical models employ a multilevel structure with random intercepts for provinces.

4.1.5 Descriptive Statistics

Table 1 presents summary statistics for the variables used in the analysis, including the dependent variables, the main independent variable (SDI), and all individual-level control variables. Descriptive statistics are reported for the analytic sample after merging WVS and SDI data and applying listwise deletion for covariates.

For binary variables, proportions are reported. For ordinal and continuous variables, means and standard deviations are shown. Presenting these statistics serves two purposes: first, it clarifies the measurement scale and distribution of each variable; second, it provides an initial overview of variation in expressive behavior and democratic context across the sample prior to multivariate analysis.

Table 1. Summary Statistics

Variable	Mean	SD	Min	Max
Talk about politics with friends	0.63	0.48	0.00	1.00
NA/DK responses (corruption items)	0.34	0.69	0.00	3.00
NA/DK responses (offline participation)	0.27	0.69	0.00	4.00

NA/DK responses (online participation)	0.31	0.83	0.00	4.00
NA/DK responses (grouped)	0.39	0.49	0.00	1.00
Subnational Democracy Index (SDI)	3.96	0.89	1.00	5.00
Organizational membership	0.27	0.45	0.00	1.00
Political interest	0.39	0.49	0.00	1.00
Information source: Daily Newspaper	0.54	0.50	0.00	1.00
Information source: TV news	0.92	0.28	0.00	1.00
Information source: Radio news	0.68	0.46	0.00	1.00
Information source: Mobile phone	0.67	0.47	0.00	1.00
Information source: Email	0.44	0.50	0.00	1.00
Information source: Internet	0.67	0.47	0.00	1.00
Information source: Social Media	0.57	0.49	0.00	1.00
Information source: Talk with friends/colleagues	0.79	0.40	0.00	1.00
Ideology	0.50	0.50	0.00	1.00
Age	2.05	0.80	1.00	3.00
Sex	0.48	0.50	0.00	1.00
Education	1.19	0.59	0.00	3.00

4.2 Measures

4.2.1 Dependent Variables

Self-censorship is conceptualized as a latent construct that I operationalize using two behavioral indicators: (a) self-censorship as talking with friends about politics and (b) self-censorship as NA answers in surveys. The two dependent variables differ in measurement scale and are modeled accordingly: the first is a binary individual-level

outcome, while the second consists of bounded counts modeled using a binomial specification.

These provide distinct yet theoretically aligned measures of expressive avoidance. If subnational democracy quality decreases, then self-censorship increases. This pattern should showcase a reduction in political discussion and an increase in non-response on sensitive items in more hybrid provinces.

4.2.1.1 Political discussion with friends

The primary indicator of self-censorship is how often respondents talk about politics with friends. Public opinion literature conceptualizes withholding political views in interpersonal settings as a form of expressive caution (Hayes et al., 2005; Noelle-Neumann, 1974). Lower discussion frequency therefore serves as a behavioral manifestation of self-censorship. This variable is binary, taking values of 1 (discusses politics occasionally or frequently) and 0 (discusses politics rarely or never), and is modeled using multilevel logistic regression. Following Hayes et al. (2006) and the Spiral of Silence framework, lower discussion frequency indicates a higher likelihood of self-censorship, reflecting expressive caution even in informal interpersonal settings.

4.2.1.2 Nonresponse to sensitive political items

As an additional indicator of self-censorship, this study builds on Shen and Truex (2021) by treating “Don’t know” and “No answer” responses to politically sensitive items as behavioral manifestations of expressive reticence. While the authors operationalize self-censorship as differential nonresponse relative to nonsensitive items at the aggregate level, this study adapts their logic to the individual level by modeling counts of nonresponse across thematically sensitive item sets. Because item nonresponse may also

reflect uncertainty or low political engagement, these outcomes are interpreted a possible direct measure of fear.

Consistent with Shen and Truex (2021), item nonresponse is interpreted as a behavioral manifestation of silence that should be more prevalent where expressive costs are perceived to be higher. The thesis examines whether its incidence varies systematically with subnational democratic context and individual characteristics.

Sensitive questions of the WVS were selected based on government related assessment and activities where people may feel social or political risk since public participation and exposure is required. The groups test sets of attitudes that can reveal different patterns depending on the democratic quality of the provincial context. Additionally, it serves as a robustness check for the primary outcome variable, since not only assessment question is included but also behavioral questions.

The first group is about perceptions of corruption. I selected the questions that allowed people to assess the local authorities. The questions were related to if to what extent they believed local authorities were involved in corruption, as well as journalists and media. Additionally, a question related to the frequency ordinary people pay a bribe, give a gift or do a favor to local officials/service providers to get services was included. The selection of the questions was guided by the level of localness of the question as well as to referring to the more authoritarian provinces context such as patronage (Gibson, 2005; Gervasoni 2018).

The second group assembles questions about political action offline. This set refers to political action where people may or not get involved and where individuals expose themselves to their context and where more authoritarian displays would

discourage this type of behaviors. The questions included examined people's involvement in signing a petition, joining in boycotts, attending lawful/peaceful demonstrations, joining unofficial strikes.

The third group was about political action online. The selection of questions follows the same logic as the group above. Although online action can show different patterns, since people may feel less exposed, Burnett et al. (2022) highlights in recent research that a majority may remain silent when there is only a minority group that expresses their opinion online. Therefore, it serves as a control to understand similar behaviors in different settings.

These outcomes are modeled as binomial variables, where the number of NA/DK responses is evaluated relative to a fixed number of items per thematic group. The models estimate the probability of self-censoring on a given item within each thematic group, conditional on provincial democratic quality and individual-level covariates. Higher proportions of NA/DK responses suggest greater expressive caution.

4.2.3 Independent Variable: Subnational Democracy

Subnational democratic quality (SDI) is the key contextual predictor. The theoretical model argues that hybrid subnational regimes produce informal pressure, greater uncertainty, and increased perceived political risks (Gervasoni, 2018; Gibson, 2005). The more hybrid the context the greater the perception of individuals is shaped towards a higher risk of speaking out an idea that contradicts the majoritarian apparent idea. This makes SDI the structural driver of self-censorship in the causal framework.

Provincial democratic quality is measured using the Subnational Democracy Index (SDI), operationalized as an ordinal categorical predictor with five levels ranging

from very low (1) to very high (5) democratic quality (see Table 2). Higher values indicate more democratic provincial environments, while lower values capture more hybrid or hegemonic political contexts. This variable reflects subnational differences in electoral competitiveness, executive constraints, and civil liberties.

Table 2. Subnational Democracy Index

Level of Democracy	Score
Very Low	1
Low	2
Moderate	3
High	4
Very High	5

Source: Gervasoni (2018).

Figure 1 displays province-level values of the Subnational Democracy Index (SDI), measured on a five-point ordered scale. The figure shows meaningful variation in democratic quality across the 13 provinces included in the analysis.

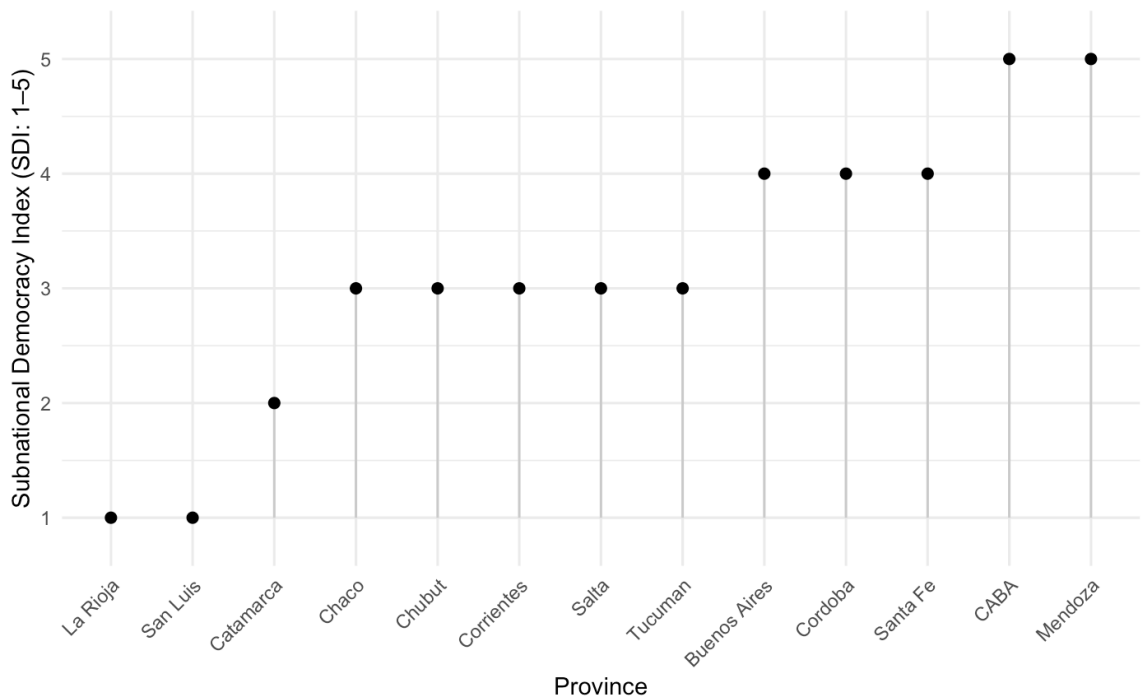


Figure 1. Rough Plot of SDI by Province

4.2.4 Control Variables

The analysis includes a set of individual-level control variables to account for well-established determinants of expressive behavior and to isolate the association between subnational democratic quality and self-censorship. These variables are selected based on the determinants of self-censorship in democratic and non-democratic settings. Control variables are served to adjust for differences in respondents' baseline propensity to express or withhold political views.

Organizational membership is included as an indicator of social embeddedness and access to supportive networks. Participation in civic, political, sports or social organizations may lower the perceived costs of expression by providing normative reinforcement and collective insulation, thereby affecting both willingness to discuss politics and patterns of item nonresponse.

Political interest is included to capture variation in engagement and attentiveness to political issues, which influences both willingness to speak and the likelihood of providing substantive responses. Individuals with higher political interest are more likely to hold formed political opinions and to participate in political discussion, while lower levels of interest are associated with greater expressive withdrawal and item nonresponse.

To reflect determinants tied to the information environment, the models also control for media exposure (or the closest available measure in the WVS), since exposure to political content and conflictual news is associated with perceived hostility and expressive caution. In addition, interpersonal trust is included as a baseline indicator of social openness and perceived social risk, helping to distinguish avoidance rooted in generalized social wariness from avoidance tied to political context.

Ideological self-placement is incorporated to account for differences in perceived expressive safety and normative positioning. Prior research shows that expressive behavior varies systematically across ideological groups, with moderates and normatively vulnerable individuals more likely to self-censor, independent of institutional context.

Institutional trust captures respondents' confidence in political institutions and authorities. Because trust shapes perceptions of political risk and legitimacy, controlling for institutional trust helps distinguish expressive reticence linked to skepticism or alienation from self-censorship associated with contextual democratic conditions.

Demographic characteristics—age, sex, and education—are included to adjust for heterogeneity in expressive behavior and survey response patterns. Age reflects differences in political socialization and tolerance for expressive risk; sex accounts for gendered patterns of political participation and expressive caution; and education proxies' political knowledge and cognitive capacity, helping to account for item nonresponse that may reflect strategic silence.

In models using political discussion with friends as the dependent variable (DV1), these controls capture individual differences in baseline expressive behavior and social engagement, while in the NA-count models (DV2) they account for variation in political attentiveness and response tendencies that may influence item nonresponse independently of subnational democratic context.

All control variables are entered at the individual level. Depending on their measurement, they are included as binary, ordinal, or continuous predictors, with coding decisions summarized in the Appendix.

4.3 Analytic Strategy

The analysis proceeds in two complementary components. First, I conduct a primary analysis with multilevel logistic regression of political discussion with friends. Then, I use the second outcome variable as a robustness analysis. I do multilevel binomial regression of NA-counts with each thematic group separately, modeling the probability of self-censoring on each sensitive item. Both rely on random intercepts for provinces and the same set of individual-level covariates. For the non-response outcomes, a binomial approach is preferred because each respondent faces a known and bounded number of items in each group. Modeling the number of NA/DK responses out of that fixed total allows the analysis to interpret coefficients as effects on the probability of self-censoring on a given item, rather than on an unbounded count.

4.3.1 Model 1: Multilevel Logistic Regression

Outcome:

Self-censorship indicator 1: political discussion with friends.

Let:

$Y_{ij} = 1$ if individual i in province j reports discussing politics with friends *occasionally* or *frequently*;

$Y_{ij} = 0$ otherwise.

Assume:

$$Y_{ij} \sim \text{Bernoulli}(p_{ij})$$

The model is specified as:

$$\text{logit}[P(Y_{ij} = 1)] = \beta_0 + \beta_1 SDI_j + \beta_2 \mathbf{X}_{ij} + u_j$$

where:

- SDI_j is the Subnational Democracy Index score for province j
- \mathbf{X}_{ij} is a vector of individual-level covariates (political interest, trust, ideology, age, sex, education, etc.)
- u_j is a province-level random intercept

The random intercepts are assumed to be independently and normally distributed:

$$u_j \sim N(0, \sigma_u^2)$$

This specification allows baseline levels of political discussion to vary across provinces while estimating the average association between subnational democratic quality and political discussion, net of individual-level characteristics.

4.3.2 Model 2: Multilevel Binomial Regression

Outcome:

Self-censorship indicator z = number of NA/DK responses to sensitive items within a group.

For each thematic group $g \in \{A, B, C\}$, let:

- n_g total number of sensitive items in group g ($n_A = 3, n_B = 5, n_C = 4$)
- S_{ijg} denote the number of NA/DK responses given by individual i in province j in group g

Assume:

$$S_{ijg} \sim \text{Binomial}(n_g, p_{ijg})$$

where p_{ijg} is the probability that individual i in province j self-censors on any given item in group g .

The multilevel binomial model is:

$$\text{logit}(p_{ijg}) = \beta_{0g} + \beta_{1g}SDI_j + \beta_{2g}\mathbf{X}_{ij} + u_{jg}$$

Where:

- $\beta_{0g}, \beta_{1g}, \beta_{2g}$ are group-specific parameters
- \mathbf{X}_{ij} is the same vector of individual-level covariates used in Model 1
- u_{jg} is a province-level random intercept for group g

The random intercepts are assumed to be independently and normally distributed:

$$u_{jg} \sim N(0, \sigma_{u_g}^2)$$

The model estimates how subnational democratic quality and individual characteristics affect the log-odds of self-censoring (NA/DK) on any given sensitive item within each group. This approach respects the bounded nature of the outcome (0 to n_g) and provides a clear probability interpretation. The model estimates how subnational democratic quality influences the probability of self-censoring on any given sensitive item, controlling for individual characteristics.

4.4 Robustness Check

To evaluate whether results are robust to alternative operationalizations of self-censorship, the study estimates multilevel binomial models using non-response to sensitive questions as an outcome. Because respondents face a fixed number of sensitive items in each thematic group, the number of NA/DK responses is treated as a binomially distributed count.

If the core argument holds—that lower subnational democratic quality increases expressive caution—then the effect of SDI should appear both in reduced political discussion (primary model) and in increased non-response to sensitive items (robustness

model). The replication of results across these two independent behavioral indicators strengthens confidence in the findings.

4.5 Summary

This chapter has outlined the data sources, measurement strategy, causal assumptions, and statistical models used to evaluate self-censorship in Argentina's subnational political contexts. By combining WVS individual-level indicators with province-level democratic quality and employing multilevel logistic and binomial models, the study captures how hybrid local regimes shape expressive political behaviors even within a national democratic framework.

CHAPTER 5

FINDINGS

This chapter presents the empirical findings for two forms of self-censorship: Talking about politics with friends (DV1) and nonresponse to sensitive political items (DV2). The primary explanatory variable is subnational democratic index (SDI), which varies across provinces in Argentina. Additional individual-level characteristics—including political interest, civic involvement, demographics, and media exposure—are incorporated as potential confounders or mediators.

5.1 Descriptive Patterns

Across the sample, most respondents report discussing politics with friends, yet a substantial minority refrains from doing so. Specifically, 62% report engaging in political discussion and 37% avoid it. This behavior varies geographically. Respondents in Santa Fe, CABA, and Buenos Aires demonstrate the highest levels of political conversation, whereas residents of San Luis, Salta, and La Rioja show the lowest. These provincial differences suggest that local context shapes individuals' willingness to engage in political expression.

Patterns of item nonresponse reveal additional variation in political expression. On average, respondents omit 0.91 of 10 sensitive items, indicating that while most answer all questions, a subset systematically withholds information. Provinces such as Tucumán, Corrientes, and San Luis exhibit the highest levels of NA behavior, whereas Santa Fe, Salta, and Chubut show the lowest.

5.2 Bivariate Associations

Across both outcomes, lower democratic quality is associated with higher self-censorship, consistent with theoretical expectations about expressive risk in hybrid or restrictive political environments. Both dependent variables used to operationalize self-censorship indicate higher levels of self-censorship in provinces classified as hybrid subnational regimes, which are characterized by lower democracy scores.

Although all the respondents show some avoidance of political conversations at all levels of democracy, the percentage of people not talking about politics with friends increases when the level of democracy decreases (see Figure 2). This pattern is consistent with theoretical expectations: citizens in more restrictive or politically competitive environments are more hesitant to express political opinions openly. Conversely, residents of more democratic provinces appear more willing to engage in everyday political discussion.

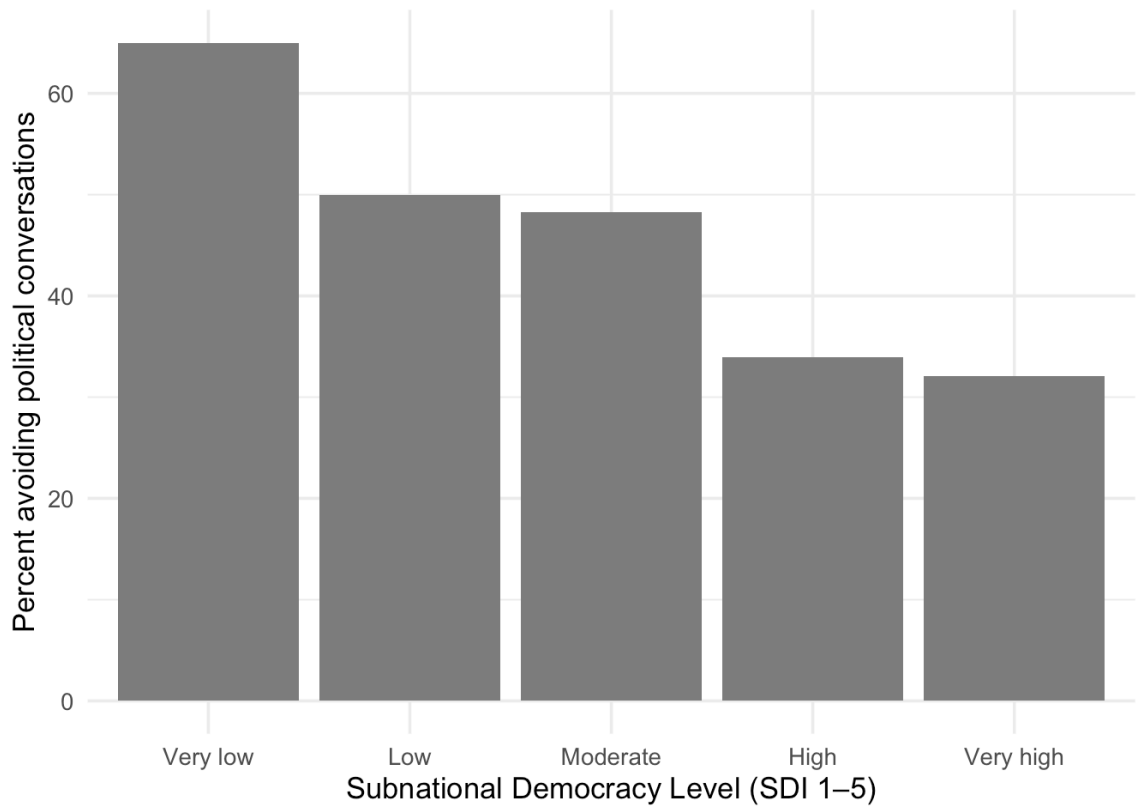


Figure 2. Avoiding Political Conversations Across SDI Levels

A similar, and even clearer, gradient emerges when examining nonresponse to sensitive survey items. In Figure 3, respondents in low-SDI provinces leave on average 1.5 sensitive items unanswered, compared to only 0.6 items in very high-SDI provinces. This general decline suggests that item nonresponse may capture a politically conditioned form of private self-censorship, whereby respondents in less democratic environments are more reluctant to disclose information on sensitive topics.

At the same time, lower levels of nonresponse in the very lowest-democracy provinces should be interpreted with caution. In such contexts, respondents may be more likely to perceive a single “acceptable” or socially sanctioned answer and therefore provide a response rather than omit it, even when their true preferences or behaviors

differ. In this sense, reduced nonresponse does not necessarily indicate greater expressive freedom but may instead reflect adaptation to a constrained informational environment.

Together, these descriptive associations motivate the use of multivariate models to test whether contextual patterns persist once individual-level characteristics are taken into account.

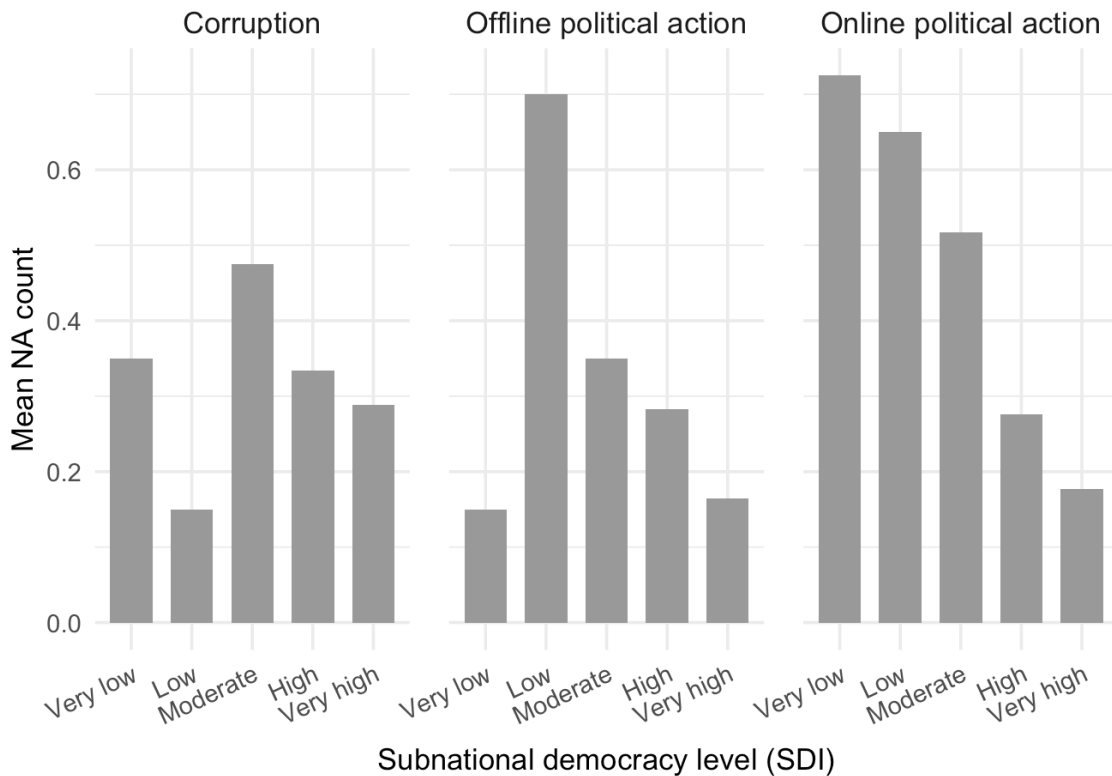


Figure 3. Nonresponse to Sensitive Items Across SDI Levels

5.3 Multilevel Model Results (DV: Talking with Friends)

Bivariate patterns may reflect both contextual and compositional differences across provinces. Individuals in more democratic and hybrid regimes differ on variables such as political interest, civic involvement, and media exposure. Therefore, multivariate

models are necessary to isolate the contextual effect of SDI from individual characteristics.

5.3.1 Model 1: Baseline Model

Model 1 (see Table 3) shows a strong positive relationship between democratic quality and conversational political engagement. Residents of more democratic provinces are significantly more likely to talk about politics with friends. This finding indicates that institutional environments shape perceptions of expressive safety.

The intercept reveals continued baseline hesitancy toward political discussion, reflecting the descriptive findings. The random intercept collapses to zero, indicating that SDI captures nearly all contextual variation in conversational avoidance.

5.3.2 Model 2: Adding Control Variables

After the inclusion of individual-level controls, SDI remains positively and statistically significantly associated with talking about politics with friends. This indicates that, conditional on the covariates included in the model, higher levels of subnational democratic quality are associated with a greater likelihood of political conversation. The reduction in the SDI coefficient relative to the baseline specification suggests that part of this association overlaps with individual-level characteristics, although the contextual association remains present.

Several individual-level covariates are also associated with political conversation. Political interest shows the strongest positive association, consistent with prior descriptive findings in the political communication literature. Membership in humanitarian organizations is positively associated with talking about politics, while membership in professional organizations is negatively associated. Men are more likely

than women to report talking about politics with friends, conditional on other factors included in the model. Other media exposure and activism variables do not exhibit consistent or statistically significant associations in this specification.

Because the analysis includes a large number of individual-level controls, observations with missing values on any covariate are excluded from the estimation. As a result, the fully controlled models are estimated on a smaller sample than the baseline models. While the fully specified models are estimated on a smaller sample due to missing values in the covariates, the substantive conclusions are consistent with those obtained from the baseline models.

Table 3. Multilevel Logistic Regression of Talking About Politics with Friends

	<i>Dependent variable:</i>	
	Baseline (1)	With Controls (2)
Subnational democracy (SDI, higher = more democratic)	0.341*** (0.074)	0.344** (0.134)
Member of Any Organization No member (ref.)	-	-
Member		-0.071 (0.252)
Political interest No Interest (ref.)	-	-
Interest		1.786*** (0.256)
Information Source Does not use source (ref.)	-	-
Daily Newspaper		0.150 (0.233)
TV news		0.712* (0.382)
Radio news		-0.017 (0.244)
Mobile phone		-0.837** (0.370)

Email		-0.0003 (0.274)
Internet		0.687* (0.387)
Social Media		0.345 (0.428)
Social Activism Not acting (ref.)	-	-
Encourage others to act		0.167 (0.226)
Encourage others to vote		0.190 (0.232)
Ideology Right (ref.)	-	-
Left		0.121 (0.216)
Sex Female (ref.)	-	-
Male		0.609*** (0.214)
Education No education / ISCED 0 (ref.)	-	-
Primary or secondary, Tertiary, Higher education		0.010 (0.184)
Age group 16–29 (ref.)	-	-
(30-49)		0.084 (0.144)
50+		
Constant	-0.802*** 0.300	-2.861*** (0.803)
Province-level variance (random intercept)	0	0.017
Province-level SD (random intercept)	0	0.13
Number of provinces	13	13
Observations	990	524
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01	

Figure 4 illustrates predicted probabilities of discussing politics with friends across levels of the Subnational Democracy Index (SDI), computed using an observed-

case approach. The predicted probability of political conversation increases steadily as subnational democratic quality rises. It starts from 47 percent in the least democratic provinces to approximately 74 percent in the most democratic ones. While uncertainty is greater at lower SDI levels, the overall pattern indicates a substantively meaningful increase in political discussion as democratic context improves. This finding suggests that more democratic provincial environments are associated with a higher likelihood of political expression in everyday conversations.

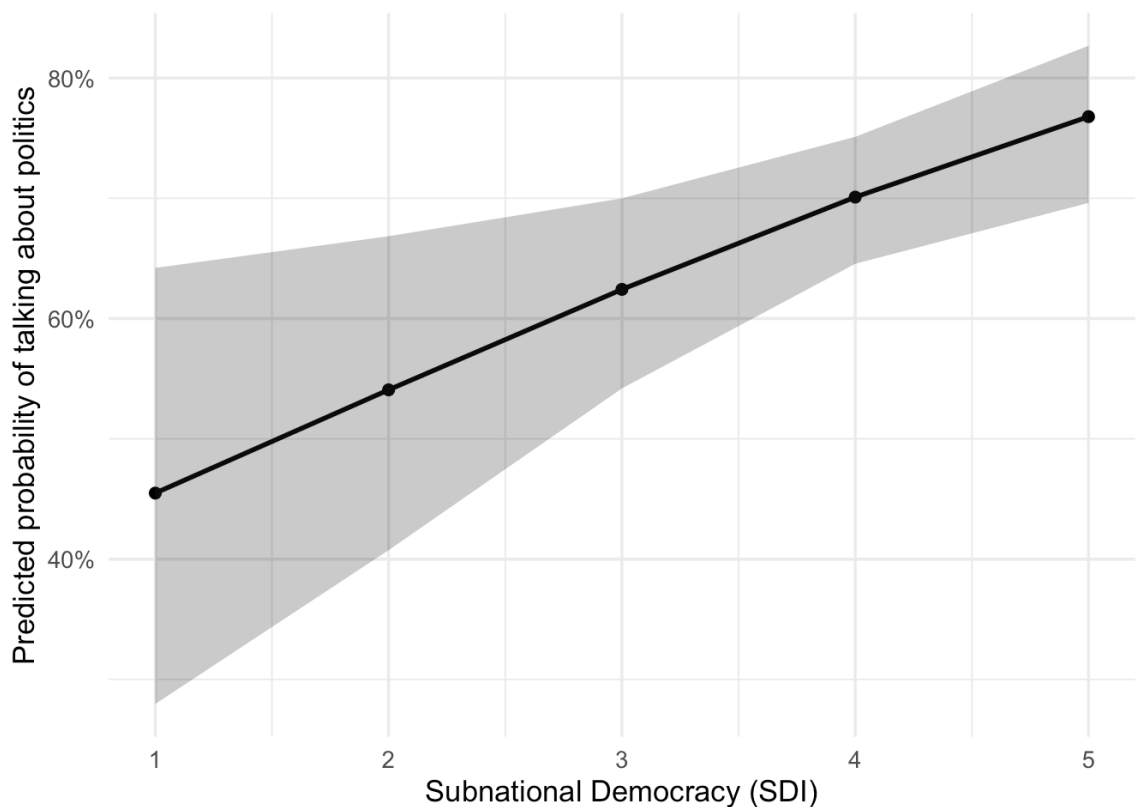


Figure 4. Predicted Probability of Political Conversation by SDI

Note. Shaded areas represent 95% confidence intervals for the predicted probabilities.

5.4 Binomial Model: NA Response as Self-Censorship

As a robustness check for the primary outcome, this section examines nonresponse to sensitive political items as an alternative manifestation of self-censorship.

Nonresponse is interpreted as a probabilistic indicator of expressive reticence that may reflect perceived political or social costs. To capture heterogeneity across different domains of political expression, three separate binomial multilevel models are estimated, corresponding to distinct thematic groups: corruption perceptions (Group A), offline political action (Group B), and online political action (Group C). Estimating these models separately allows for an assessment of whether subnational democratic context affects different aspects of expression in differentiated ways.

Baseline associations between subnational democratic quality and nonresponse vary across thematic groups. As shown in Table 4, SDI is negatively associated with nonresponse to online political action items, indicating higher probabilities of item omission in less democratic provinces. In contrast, the association between SDI and nonresponse is not statistically significant for corruption-related items or offline political action. These baseline patterns suggest that the relationship between democratic context and survey nonresponse is domain-specific rather than uniform across types of sensitive political content.

4.4.1 Differentiated Effects Across Thematic Groups

Table 4 presents the results of three binomial multilevel models, estimated separately for each thematic group of sensitive items. In each model, the outcome is the number of NA/DK responses within the group relative to the total number of items in that group. The models allow for a descriptive comparison of how nonresponse patterns vary across domains of political content, while avoiding direct causal comparisons across coefficients.

In the corruption model, the coefficient for SDI is negative but not statistically significant. This indicates that, once individual-level covariates are included, nonresponse to corruption-related items does not vary systematically with subnational democratic quality. Given that these items involve evaluative assessments of local authorities rather than reports of personal behavior, this pattern is consistent with the possibility that respondents provide answers even in less democratic contexts, rather than omitting responses. At the individual level, age and newspaper exposure are negatively associated with nonresponse, while membership in artistic or labor organizations is positively associated with omission.

For offline political action, SDI is again not statistically significant. This suggests that nonresponse to questions about activities such as demonstrations, boycotts, or petitions is not systematically associated with provincial democratic context once controls are included. Instead, variation in nonresponse appears primarily related to individual characteristics. Newspaper exposure is again negatively associated with nonresponse, indicating a consistent descriptive relationship between political information consumption and the likelihood of answering sensitive items. The province-level random intercept variance is small (0.008), suggesting limited residual clustering across provinces after accounting for observed covariates.

In contrast, the model for online political action shows a statistically significant negative association between SDI and nonresponse. Respondents in provinces with lower democratic scores exhibit higher probabilities of omitting answers to online participation items, even after controlling for individual-level characteristics. While coefficients across models are not directly comparable, this pattern indicates that nonresponse to online

political action items is more strongly patterned by subnational democratic context than nonresponse in the other two domains. Age is negatively associated with nonresponse in this model, while political interest and encouraging others to take action are positively associated with omission, suggesting that more politically engaged respondents are more likely to selectively withhold answers to online action questions.

Across all three specifications, the province-level random intercept variance is very small and, in some cases, collapses to zero. This indicates minimal residual clustering in nonresponse once SDI and individual-level covariates are included, suggesting that observed contextual and individual factors account for most of the between-province variation in NA/DK responses. Finally, the reduction in the number of observations across specifications reflects listwise deletion due to missing values on individual-level covariates included in the fully specified models, but it does not affect the main trend of the baseline models.

Table 4. NA-Count Measures of Self-Censorship Across Political Domains

	<i>Dependent variable:</i>		
	Corruption (1)	Offline Action (2)	Online Action (3)
Subnational democracy (SDI, higher = more democratic)	-0.183 (0.128)	-0.199 (0.151)	-0.450*** (0.145)
Member of Any Organization (No member)	-	-	-
Political interest No Interest (ref.)	-0.088 (0.272)	0.051 (0.329)	0.108 (0.321)
Interest	-0.118 (0.273)	0.029 (0.340)	0.356 (0.333)
Information Source	-	-	-

Does not use source (ref.)			
Daily Newspaper	-0.573** (0.254)	-0.761** (0.320)	-0.244 (0.316)
TV news	0.786 (0.518)	-0.261 (0.490)	0.073 (0.584)
Radio news	0.031 (0.270)	0.074 (0.332)	0.076 (0.338)
Mobile phone	-0.645 (0.439)	-0.728 (0.547)	-0.218 (0.542)
Email	0.492 (0.319)	-0.092 (0.399)	0.267 (0.397)
Internet	0.489 (0.422)	-0.824 (0.601)	-0.344 (0.582)
Social Media	-0.199 (0.465)	0.963 (0.725)	0.316 (0.650)
Talk with friends/colleagues	0.227 (0.358)	-0.015 (0.394)	-0.363 (0.408)
Social Activism Not acting (ref.)	-	-	-
Encourage others to act	0.062 (0.261)	0.317 (0.323)	0.309 (0.326)
Encourage others to vote	0.096 (0.269)	-0.153 (0.326)	-0.038 (0.330)
Ideology Right (ref.)	-	-	-
Left	0.362 (0.244)	0.071 (0.300)	-0.310 (0.300)
Sex Female (ref.)	-	-	-
Male	-0.086 (0.242)	0.536* (0.302)	0.180 (0.296)
Education No education / ISCED 0 (ref.)	-	-	-
Primary or secondary, Tertiary, Higher education	-0.332 (0.228)	-0.127 (0.280)	0.266 (0.230)
Age group 16–29 (ref.)	-	-	-
(30-49)	-0.302* (0.163)	-0.244 (0.205)	-0.326 (0.204)
50+			
Constant	-0.673 (0.848)	-0.059 (0.940)	-0.006 (0.931)

Province-level variance (random intercept)	0	0.212	0
Province-level SD (random intercept)	0	0.461	0
Number of provinces	13	13	13
Observations	525	525	525
<i>Note:</i>			*p<0.1; **p<0.05; ***p<0.01

Figure 5 illustrates predicted probabilities are computed using an observed-case approach, averaging predictions over the observed distribution of individual-level covariates. The predicted probabilities of nonresponse to sensitive political items across levels of the Subnational Democracy Index (SDI), are estimated separately for corruption, offline political action, and online political action. Across all three domains, the probability of nonresponse declines as subnational democratic quality increases. The decline is most pronounced for online political action, where predicted nonresponse drops sharply between low and high levels of SDI, while changes for corruption and offline political action are more gradual. Although uncertainty is larger at lower levels of SDI, the overall pattern indicates that more democratic provincial contexts are associated with lower levels of self-censorship across multiple forms of sensitive political behavior.

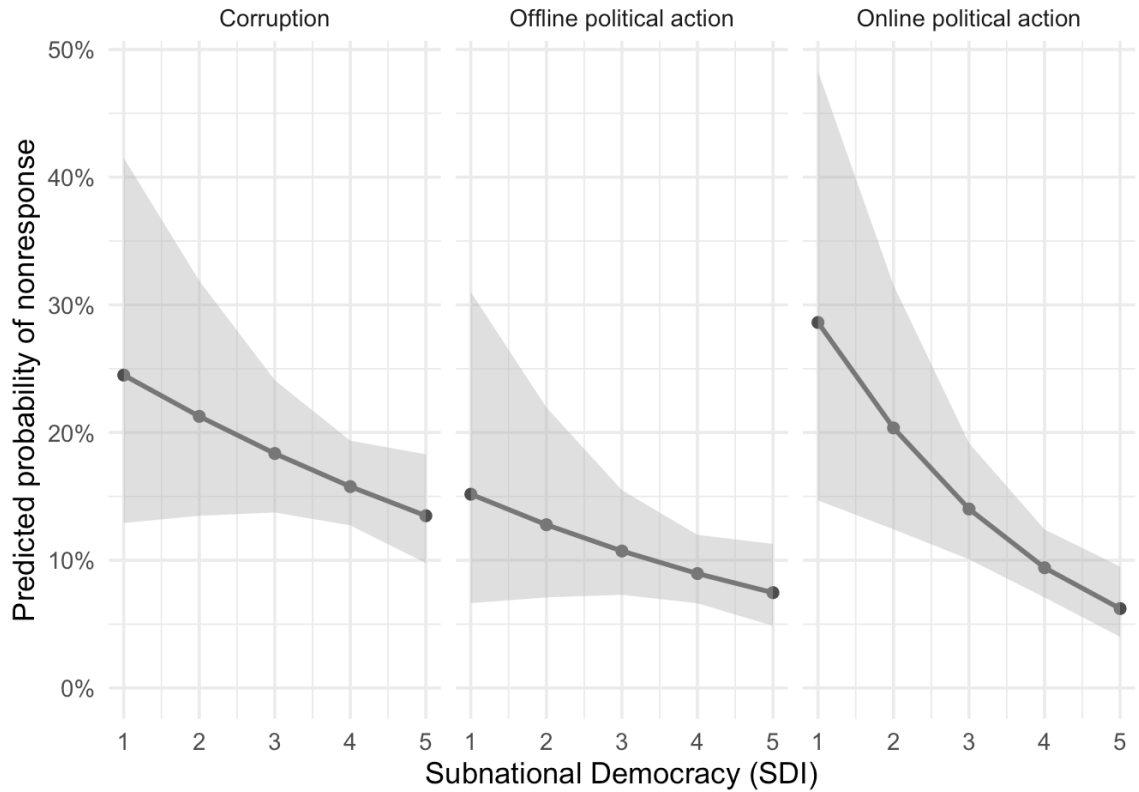


Figure 5. Predicted Probability to Sensitive Items by SDI and Domain

Note. Panels correspond to corruption, offline political action, and online political action. Points indicate predicted probabilities, and shaded areas represent 95% confidence intervals.

5.5 Robustness Checks

5.5.1 Robustness Check 1: Single-Level Logistic Regression Without Random

Effects

As a second robustness check, I re-estimated DV1 model using single-level logistic regression without the province-level random intercept (see Appendix E.3). The results are substantively identical to the multilevel specifications. These findings confirm that the observed association between democratic context and conversational self-censorship is not driven by the multilevel structure.

5.5.2 Robustness Check 2: NA Count as one single group

As a robustness check for DV2, I re-estimate the models using a binary indicator capturing whether respondents leave at least one sensitive item unanswered across all group of items (see Appendix E.3). This alternative operationalization collapses nonresponse across item groups and captures the presence of survey-based self-censorship rather than its intensity or domain-specific manifestation. Results are consistent in direction with the main DV2 specification: subnational democratic quality is negatively associated with nonresponse in baseline models, though the association attenuates once individual-level controls are included.

CHAPTER 6

DISCUSSION AND CONCLUSION

6.1 Restate Research Question and Main Findings

In this thesis, I tested different models to understand if diverse levels of democracy affect people's behavior of self-censoring themselves. The research analyzes two operationalizations of self-censorship, which are related to talking about politics with friends and the NA-count in sensitive questions from the WVS. The main findings are that when it comes to an external behavior such as talking to others, individuals in hybrid subnational contexts tend to express less in comparison to expressing views in a survey about sensitive topics related to politics. When people talk to others, the individual exposes himself to a possible social criticism and risks more than in surveys. In the latter, personal characteristics and individual factors tend to affect more the no answer behavior than the context.

These findings are consistent with the theoretical clarification made in Chapter 3, where self-censorship is described as a multidimensional phenomenon that emerges differently depending on whether people act in a social or private setting. Conversational behavior activates the relational and contextual mechanisms of self-censorship, while survey settings activate more individualized cognitive and psychological mechanisms.

6.2 Interpretation of Findings and Underlying Mechanisms

Shen and Truex (2021) conceptualize item nonresponse as a strategic response to anticipated political surveillance and punishment, particularly in national authoritarian or semi-authoritarian regimes where survey participation itself may be perceived as risky.

Under these conditions, provincial democraticness can meaningfully alter respondents' perceived exposure to sanction.

However, once individual-level controls are introduced, nonresponse behavior appears to be driven primarily by personal dispositions and cognitive engagement, consistent with the psychological dimension of self-censorship highlighted by Hayes et al. (2005). This suggests that while regime-level repression may shape item nonresponse across regimes, it highly depends on the sensitive questions that are being asked to determine if the NA/DK is related to the more hybrid context or to personal dispositions. Rather than contradicting Shen and Truex (2021), these results refine their argument by indicating that the contextual sensitivity of nonresponse depends on the scale of political threat and the social visibility of the act.

The hybrid nature of several Argentine provinces further clarifies this pattern. Subnational hybrid regimes combine formally democratic institutions with informal authoritarian practices, producing ambiguity about the boundaries of acceptable political expression. This ambiguity is most consequential in socially visible contexts, where individuals must continuously assess social norms, local power structures, and potential interpersonal consequences, activating anticipatory self-censorship. In such settings, democraticness at the provincial level meaningfully shapes conversational self-censorship by signaling whether political discussion is socially safe or risky. Importantly, SDI captures degrees of democraticness rather than hybridism per se; its relevance here lies in how variation in democratic quality interacts with hybrid informal practices to structure perceived expressive risk.

By contrast, the same hybrid features are less likely to affect private survey nonresponse. When answering sensitive items in an anonymous survey, respondents are isolated from the informal monitoring, social sanctioning, and reputational risks that characterize hybrid environments. As a result, hybridness amplifies uncertainty in interpersonal political expression but does not systematically translate into higher item nonresponse once individual-level traits are accounted for. This reinforces the interpretation that subnational democratic variation operates primarily through perceived social exposure rather than generalized fear of disclosure.

Conversational political expression, however, operates under a different logic. Talking about politics with friends is an inherently social behavior, shaped by interpersonal dynamics and the broader political environment. In this context, individuals adapt their expressive behavior to the local climate in which they live, making SDI a robust predictor even after accounting for individual-level factors. This is especially relevant for hybrid subnational regimes, which according to Gibson (2005) and Gervasoni (2018) operate under boundary control and elite dominance that—even when informal—shape perceived risks in day-to-day interactions. Hybrid environments are ambiguous, not openly repressive nor fully democratic, and this ambiguity itself, as discussed in Chapter 3, functions as a mechanism that increases caution in conversational settings.

Additionally, the items included in the NA-count model probe sensitive topics that relate to personal actions and ethical considerations. Choosing not to answer such questions may therefore stem from concerns about privacy, moral self-presentation, or uncertainty, rather than exclusively from fear of political repercussions. Shen and Truex

(2021) also emphasize that sensitivity varies greatly by country and topic, meaning that individuals may not perceive these questions as politically dangerous depending on their personal experiences. This helps explain why individual-level variables—such as age, media habits, or organizational engagement—become stronger predictors than SDI in the fully controlled model.

Taken together, these findings indicate that subnational democratic variation primarily shapes self-censorship when political expression is socially embedded and observable, whereas private survey nonresponse reflects a more heterogeneous mix of individual dispositions and topic-specific sensitivities.

6.3 Connections to Theory: Confirmations, Qualifications, and Exceptions

In first place, when it comes to the expressive behavior—talking to friends about politics—self-censorship is fully affected by the context. In hybrid subnational contexts people talk less about politics in comparison to the more democratic provinces. People are affected by the context in the sense that they perceive criticism and that shapes the fear of isolation when interacting with others. This reflects the classic mechanism described by Noelle-Neumann (1974): individuals monitor their environment through a “quasi-statistical sense” to evaluate whether their opinion aligns with the perceived majority. When people believe their views differ from the dominant local climate of opinion, they refrain from expressing them to avoid social isolation. In hybrid subnational regimes, where political elites exercise strong symbolic and material power, this perceived majority is even more defined by those local elites (Gibson, 2005; Gervasoni, 2018). As a result, individuals internalize a stronger pressure to remain silent, even when

dissent might in fact be widespread—what Noelle-Neumann (1974) calls the “silent majority.”

Second, the literature suggested that when people perceive that the government is involved in the survey or the study carried out, people tend to distrust and therefore commit self-censorship (Ho, 2008). However, the fact that the SDI variable loses significance after controlling for individual and other characteristics means that the hybrid context is not the main influence when it comes to personal responses. This aligns with the theoretical insight that the spiral of silence primarily operates in public or interpersonal contexts, where people actively anticipate disagreement or judgment. In private contexts—such as anonymous surveys—the perception of audience disagreement is less salient, and therefore the spiral-of-silence mechanism weakens.

The theory also suggests that hybrid contexts at a national level vary in the pattern and that sensitive questions are not always the same for every context (Shen and Truex, 2021; Rosenberg and Tannenber, 2018). As explained in Chapter 3, sensitivity is not universal but topic-dependent, meaning that the NA-count may not capture the same political risk across all provinces. In this way, other factors such as individual characteristics are the ones that remain important in individual interactions (Hayes, 2005). This research supports that distinction: conversational self-censorship reflects contextual pressures and the fear-of-isolation mechanism from Noelle-Neumann’s theory, while survey silence reflects psychological and cognitive mechanisms that operate independently of the local climate of opinion.

6.4 Substantive Significance of Results

The results suggest that analyzing hybrid subnational regimes and related public opinion patterns is key to achieving a broader understanding of contexts where democratic and authoritarian dynamics coexist. The relevance of the results of the first operationalization of self-censorship—talking about politics with friends—shows that local political environments continue to shape political expression even when the national regime is democratic. More democratic contexts still showcase a better platform for individuals to express themselves than the more repressive ones. The key finding here is that when it comes to analyzing this in subnational hybrid contexts, people’s perception of the local remains more important than the broader national democratic context. This aligns with Chapter 3’s argument that the ambiguity and uneven democratic quality of hybrid provinces generate climates of caution that suppress interpersonal political discussion.

The results remain important to better address policy dilemmas in more authoritarian subnational contexts, specifically in Argentina. Usually, policy and other political decisions are drawn from the capital perspective, although the country is federal in its constitutional existence. Also, more intrinsic problems such as the rentier theory that affects democratic institutions and helps authoritarian subnational leaders to perpetuate themselves can be better understood and addressed when recognizing how people behave in the political perspective. Public opinion matters at a nationwide level, but local public opinion—especially in hybrid subnational provinces—is still underrepresented. As outlined in Chapter 3, the lack of transparency and the “closed container” nature of these provinces also shape political perceptions and reinforce self-

self-censorship. For research purposes, the data access is low, and additionally, the provinces work as closed containers that do not share information from their province unless related to them in a power relation. Therefore, this study also helps to address transparency of governance, which is closely attached to the promotion of democracy.

6.5 Limitations

The specific limitations of this study are that self-censorship is a complex psychological phenomenon, and just being like that, it is not only attached to contextual factors but also related to personal characteristics of respondents. The WVS does not address behavioral questions related the individual level, such as shyness, social anxiety, lack of interest, etc. Therefore, the analysis is mostly based on the subnational democracy index affecting a specific behavior, but not addressing personal characteristics. In addition, as described in Chapter 3, the ambiguity of hybrid contexts makes it difficult to isolate the perceived severity of political risk, since individuals interpret informal pressures differently. Finally, the limited number of provinces included in the WVS sample constrains the scope for a full subnational comparison. At the same time, this limitation points to an important avenue for future research: it is likely that specific elements or manifestations of democratic erosion—such as informal elite dominance, uneven rule enforcement, or localized boundary control—are more consequential for political expression than democraticness as a broad attribute. While SDI captures meaningful variation in provincial democratic quality, further work disaggregating these components could help identify which features of subnational governance most directly shape self-censorship and expressive behavior.

6.7 Implications

This research expands the study of self-censorship into the Latin American context by connecting public opinion and political behavior with the theory of subnational regime from the comparative politics perspective. Its contributions are fourfold:

- Development of a new index of self-censorship that captures this abstract phenomenon through proxies of political participation and discussion. This follows the multidimensional conceptualization outlined in Chapter 3 and shows that different facets of self-censorship respond to different mechanisms.

- Empirical testing of the relationship between regime type and self-censorship, examining whether hybrid regimes foster higher levels of self-censorship relative to more democratic provinces. The results confirm the contextual sensitivity of expressive behavior.

- Consideration of polarization in democratic contexts as a competing explanation, thereby situating self-censorship not only as a product of authoritarian pressures but also as a byproduct of democratic dynamics. Chapter 3 highlights that echo chambers and perceived repression in democracies can also generate silence, which helps interpret variations within democratic provinces.

- Advancement of subnational analysis by linking regime type to individual-level political behavior, providing evidence from Argentina as a case of uneven democratization. This supports the argument that hybrid provinces create political climates that directly affect conversational behavior.

6.8 Future Research Directions

Future research could extend this analysis over a longer time horizon and adopt a longitudinal design to examine how changes in subnational democratic conditions affect self-censorship dynamics. Additionally, a nationwide study including all Argentine provinces would allow for a more comprehensive assessment of subnational variation. Beyond the Argentine case, extending this framework to a comparative analysis across Latin American countries would be especially valuable, given the relative lack of systematic research on self-censorship in the region and the prevalence of hybrid political arrangements at both national and subnational levels.

At the same time, the limited number of provinces included in the WVS sample highlights a broader conceptual opportunity. It is likely that specific elements or manifestations of democratic erosion—such as informal elite dominance, uneven rule enforcement, or localized boundary control—are more consequential for political expression than democraticness as a broad attribute. While the SDI captures meaningful variation in provincial democratic quality, future work could benefit from disaggregating these components or combining quantitative indices with qualitative or mixed-methods approaches to better identify which features of hybrid subnational governance most directly shape self-censorship and expressive behavior. Investigating hybrid scenarios at the subnational level is particularly promising, as these contexts often generate ambiguity rather than overt repression, a condition that appears especially conducive to anticipatory self-censorship.

Finally, future research would benefit from the development of survey instruments specifically designed to capture self-censorship as a multidimensional phenomenon. As

discussed in Chapter 3, creating and validating a measure that explicitly integrates attitudinal, expressive, and behavioral dimensions—while accounting for both individual dispositions and contextual cues—would substantially advance the study of political expression and silence across diverse regime environments.

6.9 Integrative Final Conclusion

While the study acknowledges certain limitations—such as the challenges of measuring self-censorship, given its inherently subjective and experiential nature, and the restricted access to the full spectrum of provincial regimes, particularly those most authoritarian—it nonetheless offers valuable insights. Specifically, it highlights a dimension of political behavior that remains underexplored both in Latin America and in subnational comparative research more broadly.

Thus, the contributions are twofold: first, to the literature on political behavior by theorizing and empirically testing the drivers of self-censorship; and second, to the literature on subnational and local politics by connecting regime variation to individual-level outcomes. Beyond Argentina, the study opens avenues for broader comparative inquiry into how uneven democratization across territories shapes citizens' political expression and engagement in Latin America and other regions.

Together, the results show that citizens' expressive choices are shaped simultaneously by institutional environments and personal characteristics. Conversational self-censorship reflects the political climate of the province, while concealed avoidance reflects the informational and civic resources individuals possess. As discussed, hybrid regimes produce ambiguous signals that require citizens to constantly negotiate the boundaries of safe expression, whereas private judgments in surveys activate individual

traits more than contextual pressures. These findings underscore the importance of studying political expression within multilevel contexts and highlight the subtle ways in which hybrid regimes influence participation—not through overt coercion, but through everyday decisions about what to say and what to withhold.

APPENDIX A

Table 5. Outcome, Independent and Control Variables

Variable	Question	Answer Options	Thesis Section
Q200	When you get together with your friends... discuss political matters?	1- Frequently/Occasionally 0-Never	DV: Self-Censorship
level_dem	Subnational Democracy Index score	Continuous: 1-Very Low 2-Low 3-Moderate 4-High 5-Very High	Main IV
Q199	Interest in politics	1-Very interested/Somewhat 0-Not very/Not at all	Control: Political Interest
Q201–Q208	Information Source: 1.Newspaper 2.TV News 3.Radio News 4.Mobile Phone 5.Email 6.Internet 7.Social Media 8.Talk with Friends or colleagues	1- Daily/Weekly/Monthly 0-Less than Monthly/Never	Controls: Media Exposure
Q240	Left-Right Political Scale	1-Left 2-Right	Control
X003R2	Age	Continuous: 1-16-29 years 2-30-49 years 3-50 years and over	Control: Demographics
Q275	Educational attainment	ISCED scale: 0-Early childhood education (ISCED 0) / no education 1-Primary, lower and higher secondary 2-Tertiary 3-Higher education	Control: Demographics
Q260	Sex	1-Male 0-Female	Control: Demographics

Q215–Q216	Q215: Social activism: Encouraging others to take action about political issues Q216: Social activism: Encouraging others to vote	1-Have done / Might do 0-Would never	Control
-----------	--	---	---------

Table 6. Sensitive Questions

Variable	Question	Answer Options	Thesis Section
Q115	Corruption among local authorities	1-All of them/Most of them 0-Few/None of them	Sensitive Questions
Q117	Corruption among journalists/media	1-All of them/Most of them 0-Few/None of them	Sensitive Questions
Q118	Frequency of bribery to obtain services	1- Frequently/Always 0-Rarely/Never	Sensitive Questions
Q209–Q212	Offline political actions	1-Have done / Might do 0-Would never	Sensitive Questions
Q217–Q220	Online political actions	1-Have done / Might do 0-Would never	Sensitive Questions

Table 7. Organizational Membership

Variable	Question	Answer Options	Thesis Section
Q94–Q105	Membership in various organizations: Q94: Active/Inactive membership: Church or religious organization Q95: sport or recreational org	1-Active 0-Inactive/None-member	Control: Membership

	Q96: art, music, educational organization Q97: Labor union Q98: Political Party Q99: Environmental organization Q100: Professional organization Q101: Charitable humanitarian org Q102: Consumer org Q103: Self-help, mutual aid group Q104: Women group Q105: Other org		
--	---	--	--

Table 8. Mapping to Thesis Sections

Thesis Section	Variables Used
DV: Self-censorship	Q200
IV: Subnational Democracy	level dem
Controls	Q199, Q201–Q208, Q240, Q260, Q275, X003R2
Sensitive-question SC Index	Q115, Q117, Q118, Q209–Q212, Q217–Q220
Alternative participation robustness	Q215–Q216
Membership robustness	Q94–Q105

Table 9. Recode of provincial codes

Code	Province
N_REGION_ISO == 32001	CABA
N_REGION_ISO == 32002	Buenos Aires
N_REGION_ISO == 32006	Cordoba
N_REGION_ISO == 32021	Santa Fe
N_REGION_ISO == 32013	Mendoza
N_REGION_ISO == 32017	Salta
N_REGION_ISO == 32004	Chaco
N_REGION_ISO == 32003	Catamarca
N_REGION_ISO == 32019	San Luis
N_REGION_ISO == 32005	Chubut

N REGION ISO == 32012	La Rioja
N REGION ISO == 32007	Corrientes
N REGION ISO == 32024	Tucuman

APPENDIX B

```
library(tidyverse)

— Attaching core tidyverse packages ————— tidyverse 2.0.0
—
✓ dplyr      1.1.4    ✓ readr      2.1.5
✓ forcats   1.0.0    ✓ stringr    1.5.1
✓ ggplot2   3.5.1    ✓ tibble     3.2.1
✓ lubridate 1.9.3    ✓ tidyr      1.3.1
✓ purrr     1.0.2
— Conflicts ————— tidyverse_conflicts()
—
✗ dplyr::filter() masks stats::filter()
✗ dplyr::lag()     masks stats::lag()
i Use the conflicted package (<http://conflicted.r-lib.org/>) to force all
conflicts to become errors
library(haven)
library(dplyr)
library(ggplot2)

# Modeling + outputs
library(lme4)
Loading required package: Matrix

Attaching package: 'Matrix'

The following objects are masked from 'package:tidyr':

  expand, pack, unpack
library(stargazer)

Please cite as:

Hlavac, Marek (2022). stargazer: Well-Formatted Regression and Summary
Statistics Tables.
R package version 5.2.3. https://CRAN.R-project.org/package=stargazer
library(ggeffects)
library(janitor)

Attaching package: 'janitor'

The following objects are masked from 'package:stats':

  chisq.test, fisher.test
library(modelsummary)
library(performance) # for ICC checks (if installed)

# ---- Paths (EDIT ONCE) ----
path_wvs <- "/Users/svcorbacho/Documents/DACSS 603/Final Project/WVS/WVS_Cross-
National_Wave_7_csv_v6_0.csv"
path_sdi <- "/Users/svcorbacho/Documents/DACSS 603/Final
Project/data/Subnational Democratic Index (1983-2015).csv"

# ---- Import ----
WVS_raw <- read.csv(path_wvs)
SDI_raw <- read.csv(path_sdi)

# Keep only variables used in analysis
WVS <- WVS_raw[, c(
```

```
"B_COUNTRY", "N_REGION_ISO",  
"Q94", "Q95", "Q96", "Q97", "Q98", "Q99", "Q100", "Q101", "Q102", "Q103", "Q104", "Q105",  
  "Q115", "Q117", "Q118",  
  "Q199", "Q200",  
  "Q201", "Q202", "Q203", "Q204", "Q205", "Q206", "Q207", "Q208",  
  "Q209", "Q210", "Q211", "Q212",  
  "Q215", "Q216",  
  "Q217", "Q218", "Q219", "Q220",  
  "Q240",  
  "X003R2", "Q260", "Q275"  
)]  
  
# Argentina only (WVS country code 32)  
WVS <- WVS %>% filter(B_COUNTRY == 32)
```

APPENDIX D

C.1 Recode organizational membership (Q94–Q105)

```
# 1) Recode each org item
org_fun <- function(x) {
  case_when(
    x %in% c(0, 1) ~ 0,
    x == 2 ~ 1,
    x %in% c(-1, -2, -4, -5) ~ NA_real_,
    TRUE ~ NA_real_
  )
}

WVS <- WVS %>%
  mutate(across(Q94:Q105, org_fun, .names = "{.col}_dicho"))

# 2) Make "member of any organization" (yes/no), using ONLY Q94-Q105 dichos
org_cols <- paste0("Q", 94:105, "_dicho")

WVS <- WVS %>%
  mutate(
    org_any = case_when(
      rowSums(across(all_of(org_cols), na.rm = TRUE) > 0) ~ 1,
      rowSums(is.na(across(all_of(org_cols)))) == length(org_cols) ~ NA_real_,
      TRUE ~ 0
    )
  )
}
```

C.2 Corruption/bribery items (Q115, Q117, Q118)

```
# Corruption involvement (Local authorities; Journalists/media): none/few=0,
most/all=1
corr_fun <- function(x) {
  case_when(
    x %in% c(1, 2) ~ 0,
    x %in% c(3, 4) ~ 1,
    x %in% c(-1, -2, -4, -5) ~ NA_real_,
    TRUE ~ NA_real_
  )
}

# Bribe frequency: never/rarely=0, frequently/always=1
bribe_fun <- function(x) {
  case_when(
    x %in% c(1, 2) ~ 0,
    x %in% c(3, 4) ~ 1,
    x %in% c(-1, -2, -4, -5) ~ NA_real_,
    TRUE ~ NA_real_
  )
}

WVS <- WVS %>%
  mutate(
    Q115_dicho = corr_fun(Q115),
    Q117_dicho = corr_fun(Q117),
    Q118_dicho = bribe_fun(Q118)
  )
}
```

C.3 Political interest (Q199) and DV1 (Q200)

```

# Political interest: interested=1, not interested=0
WVS <- WVS %>%
  mutate(
    Q199_dicho = case_when(
      Q199 %in% c(1, 2) ~ 1,
      Q199 %in% c(3, 4) ~ 0,
      Q199 %in% c(-1, -2, -4, -5) ~ NA_real_,
      TRUE ~ NA_real_
    ),
    # DV1: talking with friends: frequently/occasionally=1, never=0
    Q200_dicho = case_when(
      Q200 %in% c(1, 2) ~ 1,
      Q200 == 3 ~ 0,
      Q200 %in% c(-1, -2, -4, -5) ~ NA_real_,
      TRUE ~ NA_real_
    )
  )

```

C.4 Information sources (Q201–Q208) and activism (Q215–Q220)

```

# Media exposure: daily/weekly/monthly=1; less/never=0
media_fun <- function(x) {
  case_when(
    x %in% c(1, 2, 3) ~ 1,
    x %in% c(4, 5) ~ 0,
    x %in% c(-1, -2, -4, -5) ~ NA_real_,
    TRUE ~ NA_real_
  )
}

WVS <- WVS %>%
  mutate(across(Q201:Q208, media_fun, .names = "{.col}_dicho"))

# Political action / activism: have done/might do=1, would never=0
action_fun <- function(x) {
  case_when(
    x %in% c(1, 2) ~ 1,
    x == 3 ~ 0,
    x %in% c(-1, -2, -4, -5) ~ NA_real_,
    TRUE ~ NA_real_
  )
}

WVS <- WVS %>%
  mutate(across(c(Q209:Q212, Q215, Q216, Q217:Q220), action_fun, .names =
"{.col}_dicho"))

```

C.5 Ideology and demographics

```

# Ideology: left=1 (1-5), right=0 (6-10)
WVS <- WVS %>%
  mutate(
    Q240_dicho = case_when(
      Q240 %in% 1:5 ~ 1,
      Q240 %in% 6:10 ~ 0,
      Q240 %in% c(-1, -2, -4, -5) ~ NA_real_,
      TRUE ~ NA_real_
    )
  )

# Age categories already coded 1/2/3, keep as is: 16-29 years=1, 30-49 years=2,
50 years and over=3
WVS <- WVS %>%
  mutate(

```

```

X003R2_r = case_when(
  X003R2 %in% c(1,2,3) ~ X003R2,
  X003R2 %in% c(-1, -2, -4, -5) ~ NA_real_,
  TRUE ~ NA_real_
),
# Sex: male=1, female=0
Q260_r = case_when(
  Q260 == 1 ~ 1,
  Q260 == 2 ~ 0,
  Q260 %in% c(-1, -2, -4, -5) ~ NA_real_,
  TRUE ~ NA_real_
),
# Education: Early childhood education (ISCED 0) / no education=0, Primary,
lower and higher secondary=1, Tertiary=2, Higher education=3
Q275_r = case_when(
  Q275 == 0 ~ 0,
  Q275 %in% c(1,2,3) ~ 1,
  Q275 %in% c(4,5) ~ 2,
  Q275 %in% c(6,7,8) ~ 3,
  Q275 %in% c(-1, -2, -4, -5) ~ NA_real_,
  TRUE ~ NA_real_
)
)
)

```

C.6 Province labels and merge with SDI

```

# Province recode (only provinces appearing in WVS extract)
WVS <- WVS %>%
  mutate(
    N_REGION_ISO = as.integer(as.character(N_REGION_ISO)),
    province = case_when(
      N_REGION_ISO == 32001 ~ "CABA",
      N_REGION_ISO == 32002 ~ "Buenos Aires",
      N_REGION_ISO == 32006 ~ "Cordoba",
      N_REGION_ISO == 32021 ~ "Santa Fe",
      N_REGION_ISO == 32013 ~ "Mendoza",
      N_REGION_ISO == 32017 ~ "Salta",
      N_REGION_ISO == 32004 ~ "Chaco",
      N_REGION_ISO == 32003 ~ "Catamarca",
      N_REGION_ISO == 32019 ~ "San Luis",
      N_REGION_ISO == 32005 ~ "Chubut",
      N_REGION_ISO == 32012 ~ "La Rioja",
      N_REGION_ISO == 32007 ~ "Corrientes",
      N_REGION_ISO == 32024 ~ "Tucuman",
      TRUE ~ NA_character_
    )
  )

# Merge SDI
data_merged <- left_join(WVS, SDI_raw, by = "province")

# Recode SDI categories to 1-5
data_merged <- data_merged %>%
  mutate(level_dem = case_when(
    level_dem == "Very low" ~ 1,
    level_dem == "Low" ~ 2,
    level_dem == "Moderate" ~ 3,
    level_dem == "High" ~ 4,
    level_dem == "Very high" ~ 5,
    TRUE ~ NA_real_
  ))

```

C.7 DV2 NA-count measures (A/B/C and total)

```

library(dplyr)

# Define sensitive item groups
cols_corrupt <- c("Q115_dicho", "Q117_dicho", "Q118_dicho")
cols_offline <- c("Q209_dicho", "Q210_dicho", "Q211_dicho", "Q212_dicho")
cols_online <- c("Q217_dicho", "Q218_dicho", "Q219_dicho", "Q220_dicho")

# (Optional but recommended) check columns exist
needed <- c(cols_corrupt, cols_offline, cols_online)
missing_cols <- setdiff(needed, names(data_merged))
if (length(missing_cols) > 0) {
  stop("These columns are missing in data_merged: ", paste(missing_cols,
collapse = ", "))
}

data_merged <- data_merged %>%
  mutate(
    na_count_A = rowSums(is.na(across(all_of(cols_corrupt)))),
    na_count_B = rowSums(is.na(across(all_of(cols_offline)))),
    na_count_C = rowSums(is.na(across(all_of(cols_online)))),
    na_count_total = na_count_A + na_count_B + na_count_C,
    na_any = if_else(na_count_total > 0, 1L, 0L)
  )

data_merged <- data_merged %>%
  mutate(
    na_bin_A = if_else(na_count_A > 0, 1L, 0L),
    na_bin_B = if_else(na_count_B > 0, 1L, 0L),
    na_bin_C = if_else(na_count_C > 0, 1L, 0L)
  )

```

APPENDIX E

```
desc_data <- data_merged %>%
  select(
    talk_friends = Q200_dicho,
    na_corr = na_count_A,
    na_offline = na_count_B,
    na_online = na_count_C,
    na_grouped = na_any,
    SDI = level_dem,
    org_member = org_any,
    pol_interest = Q199_dicho,
    info_source_paper = Q201_dicho,
    info_source_tv = Q202_dicho,
    info_source_radio = Q203_dicho,
    info_source_mobile = Q204_dicho,
    info_source_email = Q205_dicho,
    info_source_internet = Q206_dicho,
    info_source_socialm = Q207_dicho,
    info_source_talkfriends = Q208_dicho,
    ideology = Q240_dicho,
    age = X003R2_r,
    sex = Q260_r,
    education = Q275_r
  )

datasummary(All(desc_data) ~ Mean + SD + Min + Max,
  data = desc_data,
  output = "markdown")
```

E.1 DV1 Descriptive Statistics by Province

```
desc_Q200_province <- data_merged %>%
  group_by(province) %>%
  summarise(
    n = n(),
    mean_talk = mean(Q200_dicho, na.rm = TRUE),
    sd_talk = sd(Q200_dicho, na.rm = TRUE)
  ) %>%
  arrange(mean_talk)

desc_Q200_province
# A tibble: 13 × 4
  province      n mean_talk sd_talk
  <chr>      <int>    <dbl>  <dbl>
1 La Rioja      20     0.35   0.489
2 Salta          20     0.35   0.489
3 San Luis       20     0.35   0.489
4 Chubut         20     0.4    0.503
5 Catamarca     20     0.5    0.514
6 Tucuman       20     0.55   0.510
7 Chaco          20     0.556  0.511
8 Mendoza       40     0.615  0.493
9 Corrientes    40     0.625  0.490
10 Cordoba       60     0.633  0.486
11 Buenos Aires 420     0.655  0.476
12 CABA          203     0.692  0.463
13 Santa Fe     100     0.7    0.461

ggplot(desc_Q200_province,
  aes(x = reorder(province, mean_talk), y = mean_talk)) +
  geom_col(fill = "grey60") +
  coord_flip() +
```

```
labs(
  x = "Province",
  y = "Proportion talking about politics with friends",
  title = "Political Conversation with Friends by Province"
) +
theme_minimal(base_size = 13)
```

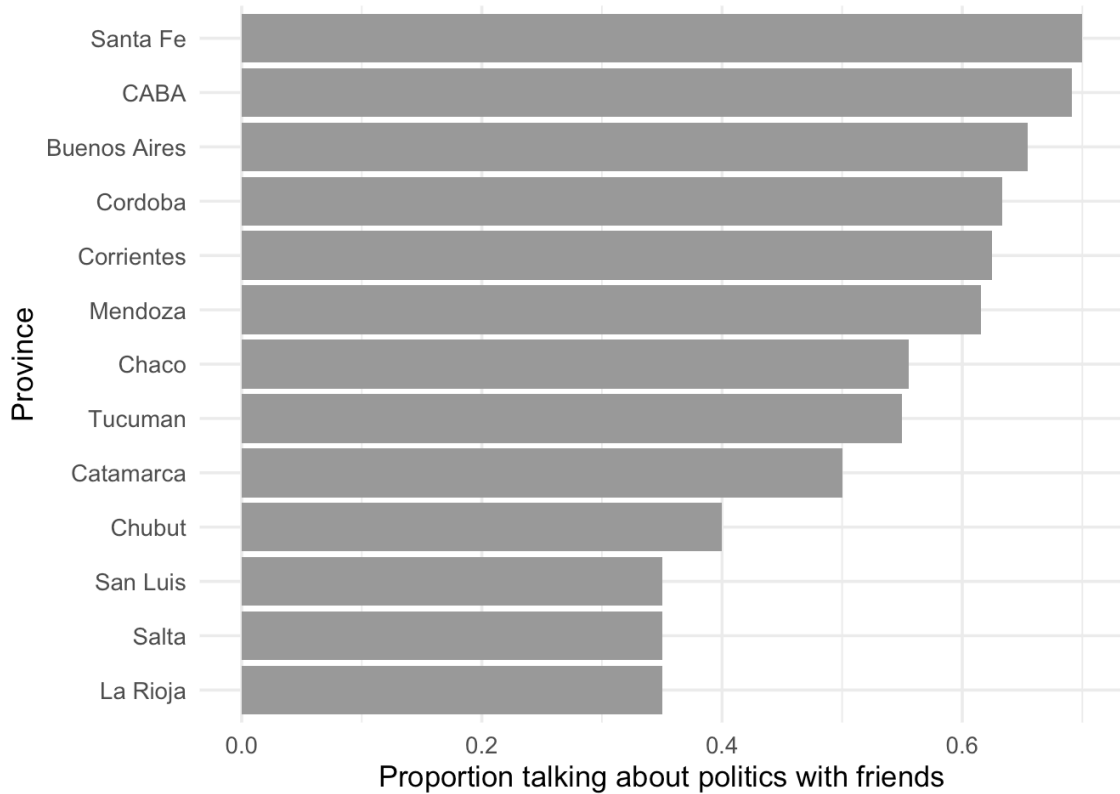


Figure 6. Political Conversation with Friends by Province

E.2 DV2 Descriptive Statistics by Province and Group

```
# Group A: Corruption
desc_NA_A_province <- data_merged %>%
  group_by(province) %>%
  summarise(
    n = n(),
    mean_na_A = mean(na_count_A, na.rm = TRUE),
    sd_na_A = sd(na_count_A, na.rm = TRUE)
  ) %>%
  arrange(mean_na_A)
```

```
desc_NA_A_province
# A tibble: 13 × 4
  province      n mean_na_A sd_na_A
  <chr>      <int>   <dbl>   <dbl>
1 Santa Fe    100    0.14    0.349
2 Catamarca   20    0.15    0.489
3 Mendoza    40    0.175   0.446
4 Salta      20    0.2     0.523
```

```

5 Chubut      20      0.25    0.639
6 CABA       203     0.310    0.643
7 La Rioja   20      0.35    0.671
8 Chaco      20      0.35    0.671
9 San Luis   20      0.35    0.587
10 Buenos Aires 420    0.357    0.712
11 Cordoba   60      0.5     0.873
12 Tucuman   20      0.6     0.883
13 Corrientes 40     0.725    1.13
# Group B: Offline political action
desc_NA_B_province <- data_merged %>%
  group_by(province) %>%
  summarise(
    n = n(),
    mean_na_B = mean(na_count_B, na.rm = TRUE),
    sd_na_B = sd(na_count_B, na.rm = TRUE)
  ) %>%
  arrange(mean_na_B)

```

```

desc_NA_B_province
# A tibble: 13 × 4
  province      n mean_na_B sd_na_B
  <chr>      <int>   <dbl>   <dbl>
1 Chaco        20     0.05    0.224
2 Salta        20     0.05    0.224
3 La Rioja     20     0.1     0.308
4 Chubut       20     0.15    0.489
5 CABA        203     0.158   0.576
6 Mendoza     40     0.2     0.464
7 San Luis    20     0.2     0.523
8 Santa Fe    100     0.25    0.575
9 Buenos Aires 420    0.264   0.640
10 Corrientes  40     0.35    0.949
11 Cordoba     60     0.467   0.982
12 Catamarca  20     0.7     0.865
13 Tucuman     20     1.15    1.57

```

```

# Group C: Online political action
desc_NA_C_province <- data_merged %>%
  group_by(province) %>%
  summarise(
    n = n(),
    mean_na_C = mean(na_count_C, na.rm = TRUE),
    sd_na_C = sd(na_count_C, na.rm = TRUE)
  ) %>%
  arrange(mean_na_C)

```

```

desc_NA_C_province
# A tibble: 13 × 4
  province      n mean_na_C sd_na_C
  <chr>      <int>   <dbl>   <dbl>
1 Chubut        20     0       0
2 CABA        203    0.123   0.398
3 Santa Fe     100    0.16    0.465
4 Salta        20     0.2     0.894
5 Buenos Aires 420    0.286   0.766
6 Cordoba     60     0.4     0.942
7 La Rioja     20    0.45    1.10
8 Chaco        20    0.45    0.945
9 Mendoza     40    0.45    1.22
10 Corrientes  40    0.575   1.20
11 Catamarca  20    0.65    1.04
12 San Luis    20     1       1.41
13 Tucuman     20    1.3     1.84

```

```

# Prepare long-format data for plotting
plot_NA_province <- data_merged %>%
  group_by(province) %>%
  summarise(
    mean_na_A = mean(na_count_A, na.rm = TRUE),
    mean_na_B = mean(na_count_B, na.rm = TRUE),
    mean_na_C = mean(na_count_C, na.rm = TRUE)
  ) %>%
  pivot_longer(
    cols = starts_with("mean_na_"),
    names_to = "group",
    values_to = "mean_na"
  ) %>%
  mutate(
    group = recode(
      group,
      mean_na_A = "Corruption",
      mean_na_B = "Offline political action",
      mean_na_C = "Online political action"
    )
  )

# Plot
ggplot(plot_NA_province,
       aes(x = reorder(province, mean_na), y = mean_na)) +
  geom_col(fill = "grey60") +
  coord_flip() +
  facet_wrap(~ group, scales = "free_x") +
  labs(
    x = "Province",
    y = "Mean NA count",
    title = "Mean Nonresponse to Sensitive Items by Province and Item Group"
  ) +

```

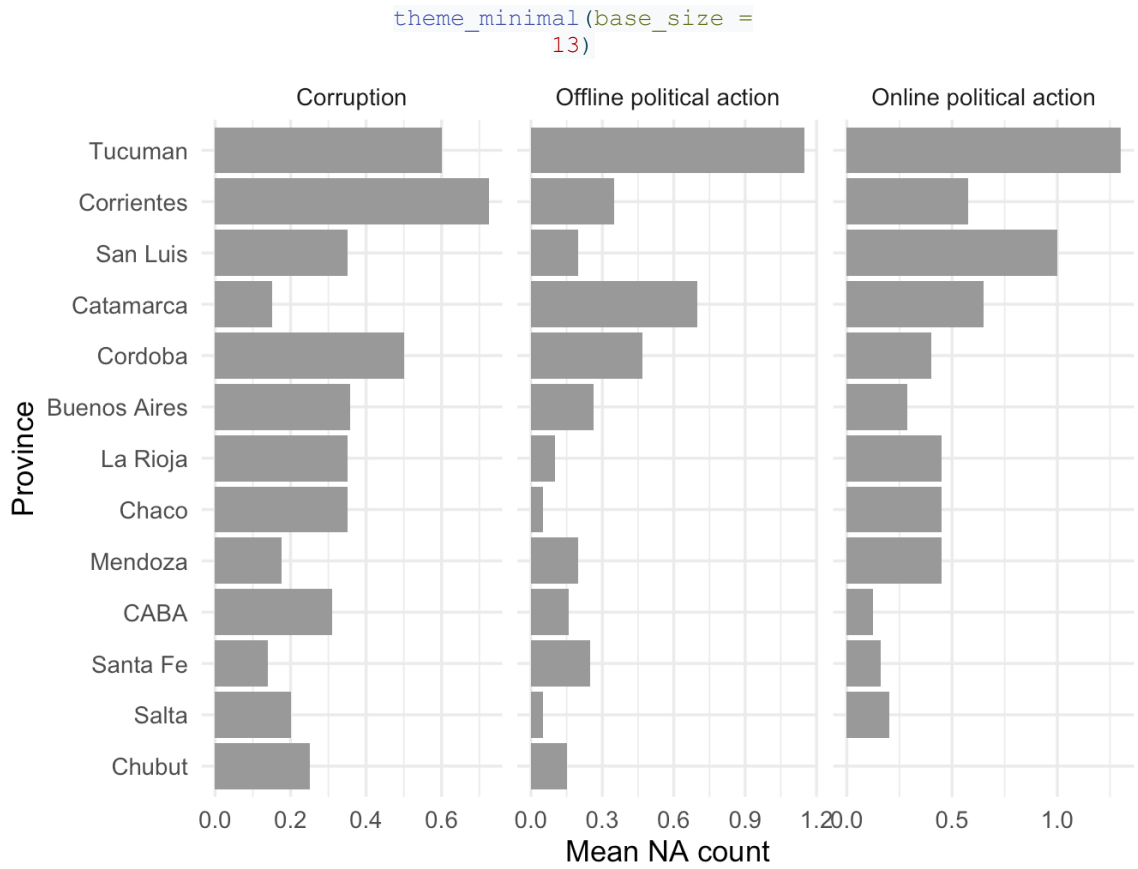


Figure 7. Mean Nonresponse to Sensitive Items by Province and Domain

E.3 Rough Plot

```
data_merged %>%
  distinct(province, level_dem) %>%
  ggplot(aes(x = reorder(province, level_dem), y = level_dem)) +
  geom_segment(
    aes(xend = province, y = 1, yend = level_dem),
    color = "grey80"
  ) +
  geom_point(size = 2) +
  scale_y_continuous(breaks = 1:5, limits = c(0.8, 5.2)) +
  labs(
    x = "Province",
    y = "Subnational Democracy Index (SDI: 1-5)"
  ) +
  theme_minimal() +
  theme(
    axis.text.x = element_text(angle = 45, hjust = 1)
  )
```

E.4 SDI Table

```
library(dplyr)

sdi_table <- data_merged %>%
  distinct(province, level_dem) %>%
  arrange(level_dem) %>%
```

```

mutate(
  SDI_label = case_when(
    level_dem == 1 ~ "Very low",
    level_dem == 2 ~ "Low",
    level_dem == 3 ~ "Medium",
    level_dem == 4 ~ "High",
    level_dem == 5 ~ "Very high"
  )
)

```

E.5 Outcomes by SDI Level (1–5)

```

# 1) SDI as factor with labels
data_merged <- data_merged %>%
  mutate(
    SDI_level = factor(
      level_dem,
      levels = 1:5,
      labels = c("Very low", "Low", "Moderate", "High", "Very high")
    )
  )

```

```

# DV1: % avoiding political conversations (Q200_dicho == 0)
avoid_talk_SDI <- data_merged %>%
  group_by(SDI_level) %>%
  summarise(
    n = sum(!is.na(Q200_dicho)),
    pct_avoid = mean(Q200_dicho == 0, na.rm = TRUE) * 100,
    pct_talk = mean(Q200_dicho == 1, na.rm = TRUE) * 100,
    .groups = "drop"
  )

```

```

ggplot(avoid_talk_SDI, aes(x = SDI_level, y = pct_avoid)) +
  geom_col(fill = "grey50") +
  labs(
    x = "Subnational Democracy Level (SDI 1-5)",
    y = "Percent avoiding political conversations",
    title = "Avoiding Political Conversations Across SDI Levels"
  ) +
  theme_minimal(base_size = 14)

```

E.6 NA Self-Censorship by SDI Level and Group

```

# Ensure SDI is a labeled factor
data_merged <- data_merged %>%
  mutate(
    SDI_level = factor(
      level_dem,
      levels = 1:5,
      labels = c("Very low", "Low", "Moderate", "High", "Very high")
    )
  )

```

```

# Aggregate mean NA counts by SDI level and group
NA_SDI_grouped <- data_merged %>%
  group_by(SDI_level) %>%
  summarise(
    mean_na_A = mean(na_count_A, na.rm = TRUE),
    mean_na_B = mean(na_count_B, na.rm = TRUE),
    mean_na_C = mean(na_count_C, na.rm = TRUE),
    .groups = "drop"
  ) %>%
  pivot_longer(
    cols = starts_with("mean_na_"),

```

```

names_to = "group",
values_to = "mean_na"
) %>%
mutate(
  group = recode(
    group,
    mean_na_A = "Corruption",
    mean_na_B = "Offline political action",
    mean_na_C = "Online political action"
  )
)

# Plot
ggplot(NA_SDI_grouped, aes(x = SDI_level, y = mean_na)) +
  geom_col(fill = "grey60", width = 0.7) +
  facet_wrap(~ group) +
  labs(
    x = "Subnational democracy level (SDI)",
    y = "Mean NA count",
    title = "Nonresponse to Sensitive Items Across SDI Levels and Domains"
  ) +
  theme_minimal() +
  theme(
    # Title: smaller and centered
    plot.title = element_text(size = 16, hjust = 0.5),

    # Axis titles
    axis.title.x = element_text(size = 13, margin = margin(t = 8)),
    axis.title.y = element_text(size = 13),

    # Rotate x labels
    axis.text.x = element_text(
      size = 11,
      angle = 25,
      hjust = 1
    ),
    axis.text.y = element_text(size = 11),

    # Facet titles
    strip.text = element_text(size = 13),

    # Reduce crowding between facets
    panel.spacing = unit(1.2, "lines"),

    # Margins
    plot.margin = margin(10, 10, 10, 10)
  )

```

E.7 Relationship DV1 (Q200) × DV2 NA-groups

```

desc NA_groups by_Q200 <- data_merged %>%
  group_by(Q200_dicho) %>%
  summarise(
    n = n(),
    # Group A: corruption
    mean_na_A = mean(na_count_A, na.rm = TRUE),
    sd_na_A = sd(na_count_A, na.rm = TRUE),
    # Group B: offline action
    mean_na_B = mean(na_count_B, na.rm = TRUE),
    sd_na_B = sd(na_count_B, na.rm = TRUE),
    # Group C: online action
    mean_na_C = mean(na_count_C, na.rm = TRUE),
    sd_na_C = sd(na_count_C, na.rm = TRUE),
  )

```

```

# Optional: total index
mean_na_total = mean(na_count_total, na.rm = TRUE),
sd_na_total   = sd(na_count_total, na.rm = TRUE),
.groups = "drop"
)

desc_NA_groups_by_Q200
# A tibble: 3 × 10
  Q200_dicho     n mean_na_A sd_na_A mean_na_B sd_na_B mean_na_C sd_na_C
  <dbl> <int>   <dbl> <dbl>   <dbl> <dbl>   <dbl> <dbl>
1     0   364   0.385  0.768   0.324  0.799   0.349  0.931
2     1   626   0.307  0.639   0.227  0.612   0.281  0.770
3    NA    13   0.462  0.967   0.462  0.660   0.308  0.630
# i 2 more variables: mean_na_total <dbl>, sd_na_total <dbl>
NA_bin_long <- data_merged %>%
  select(Q200_dicho, na_bin_A, na_bin_B, na_bin_C) %>%
  filter(!is.na(Q200_dicho)) %>%
  mutate(
    talk_status = if_else(Q200_dicho == 1, "Talks politics", "Avoids politics")
  ) %>%
  pivot_longer(
    cols = starts_with("na_bin_"),
    names_to = "group",
    values_to = "na_bin"
  ) %>%
  mutate(
    group = recode(
      group,
      na_bin_A = "Corruption",
      na_bin_B = "Offline political action",
      na_bin_C = "Online political action"
    )
  )

ggplot(NA_bin_long, aes(x = talk_status, y = na_bin)) +
  stat_summary(fun = mean, geom = "col", fill = "grey60") +
  facet_wrap(~ group) +
  scale_y_continuous(labels = scales::percent) +
  labs(
    x = NULL,
    y = "Proportion with at least one nonresponse",
    title = "Nonresponse to Sensitive Items by Political Conversation"
  ) +
  theme_minimal()

```

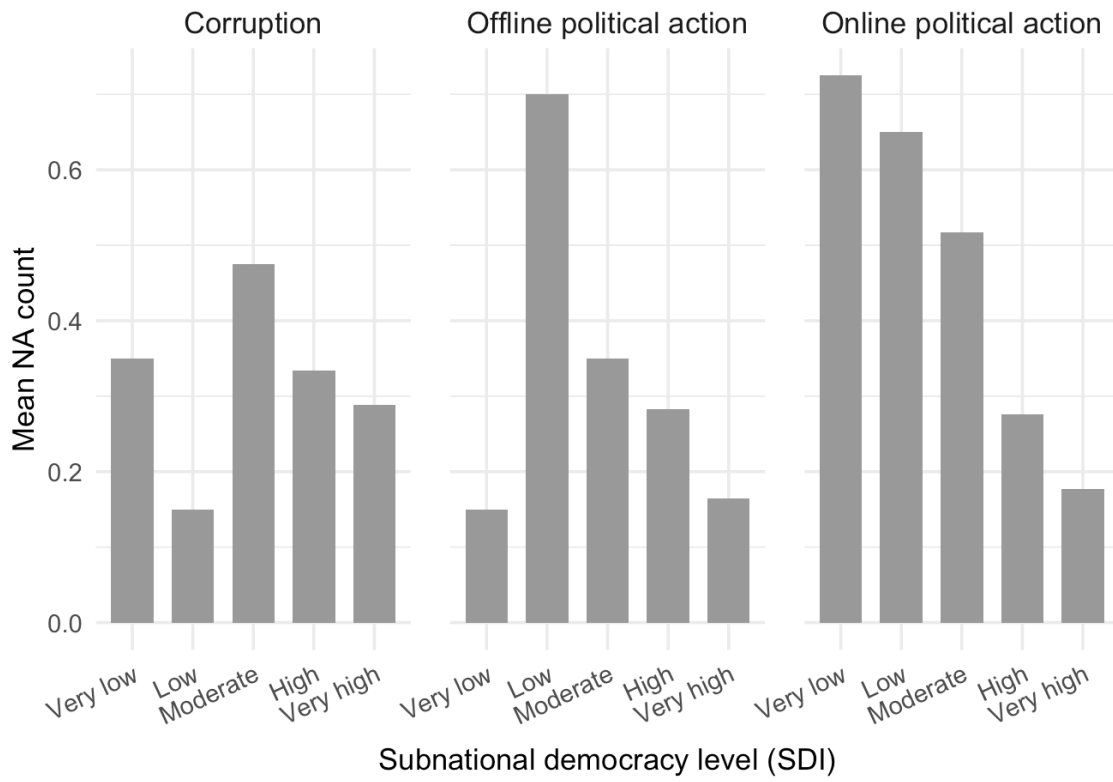


Figure 8. Nonresponse to Sensitive Items by Political Conversation with Friends

APPENDIX F

F.1 DV1 Multilevel Logit Regression Model

```
m_glmer_base <- glmer(Q200_dicho ~ level_dem + (1 | province),
  data = data_merged, family = binomial)
summary(m_glmer_base)
Generalized linear mixed model fit by maximum likelihood (Laplace
  Approximation) [glmerMod]
Family: binomial (logit)
Formula: Q200_dicho ~ level_dem + (1 | province)
Data: data_merged
```

	AIC	BIC	logLik	-2*log(L)	df.resid
	1286.6	1301.3	-640.3	1280.6	987

```
Scaled residuals:
  Min      1Q  Median      3Q      Max
-1.5717 -1.3251  0.6362  0.7547  1.2593

Random effects:
 Groups   Name      Variance Std.Dev.
 province (Intercept) 0          0
Number of obs: 990, groups: province, 13

Fixed effects:
              Estimate Std. Error z value Pr(>|z|)
(Intercept) -0.80247    0.29961  -2.678   0.0074 **
level_dem    0.34136    0.07446   4.584 4.55e-06 ***
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Correlation of Fixed Effects:
      (Intr)
level_dem -0.975
optimizer (Nelder_Mead) convergence code: 0 (OK)
boundary (singular) fit: see help('isSingular')
# Logistic ICC on latent scale: tau_00 / (tau_00 + pi^2/3)
tau00 <- as.numeric(VarCorr(m_glmer_base)$province[1,1])
icc_logit <- tau00 / (tau00 + (pi^2/3)); icc_logit
[1] 0
# Helper (also reports ICC types)
performance::icc(m_glmer_base)
[1] NA
# Partial pooling: multilevel logistic with random slope

# "Clusters" = provinces
n_clusters <- n_distinct(data_merged$province)
sizes <- data_merged %>% count(province, sort = TRUE)

n_clusters
[1] 13
sizes
  province  n
1 Buenos Aires 420
2 CABA 203
3 Santa Fe 100
4 Cordoba 60
5 Corrientes 40
6 Mendoza 40
7 Catamarca 20
```

```

8       Chaco  20
9       Chubut 20
10      La Rioja 20
11      Salta  20
12      San Luis 20
13      Tucuman 20
# Extract province-specific coefficients (already includes fixed + random
parts)
coefs_glmm <- coef(m_glmer_base)$province %>%
  rownames_to_column("province") %>%
  transmute(
    province,
    slope_level_dem = level_dem,
    OR = exp(level_dem)
  )

# Sort to see which provinces have strongest positive effect
coefs_glmm %>% arrange(desc(OR)) %>% head(10)
  province slope_level_dem      OR
1 Buenos Aires  0.3413589 1.406858
2 CABA          0.3413589 1.406858
3 Catamarca    0.3413589 1.406858
4 Chaco        0.3413589 1.406858
5 Chubut       0.3413589 1.406858
6 Cordoba      0.3413589 1.406858
7 Corrientes   0.3413589 1.406858
8 La Rioja     0.3413589 1.406858
9 Mendoza      0.3413589 1.406858
10 Salta       0.3413589 1.406858
ranef(m_glmer_base)
$province
      (Intercept)
Buenos Aires    0
CABA            0
Catamarca       0
Chaco           0
Chubut          0
Cordoba         0
Corrientes      0
La Rioja        0
Mendoza         0
Salta           0
San Luis        0
Santa Fe        0
Tucuman         0

with conditional variances for "province"
# VarCorr(model) to visualize how much those random intercepts and slopes vary
across groups, and how correlated those random effects are.
VarCorr(m_glmer_base)
  Groups   Name      Std.Dev.
  province (Intercept) 0
m_glmer_full <- glmer(
  Q200_dicho ~ level_dem + org_any +
    Q199_dicho +
    Q201_dicho + Q202_dicho + Q203_dicho + Q204_dicho + Q205_dicho + Q206_dicho
+ Q207_dicho +
    Q215_dicho + Q216_dicho + Q240_dicho +
    Q260_r + Q275_r + X003R2_r +
    (1 | province),
  data = data_merged,
  family = binomial,
  control = glmerControl(optimizer = "bobyqa", optCtrl = list(maxfun = 2e5))

```

```

)

summary(m_glmr_full)
Generalized linear mixed model fit by maximum likelihood (Laplace
Approximation) [glmerMod]
Family: binomial ( logit )
Formula: Q200_dicho ~ level_dem + org_any + Q199_dicho + Q201_dicho +
Q202_dicho + Q203_dicho + Q204_dicho + Q205_dicho + Q206_dicho +
Q207_dicho + Q215_dicho + Q216_dicho + Q240_dicho + Q260_r +
Q275_r + X003R2_r + (1 | province)
Data: data_merged
Control: glmerControl(optimizer = "bobyqa", optCtrl = list(maxfun = 2e+05))

      AIC      BIC    logLik -2*log(L)  df.resid
      586.0     662.7    -275.0     550.0     506

Scaled residuals:
      Min       1Q   Median       3Q      Max
-4.6023 -0.8053  0.3270  0.6915  2.4454

Random effects:
Groups   Name              Variance Std.Dev.
province (Intercept) 0.01699  0.1303
Number of obs: 524, groups: province, 13

Fixed effects:
              Estimate Std. Error z value Pr(>|z|)
(Intercept) -2.8606233   0.8031573  -3.562 0.000368 ***
level_dem    0.3442282   0.1342859   2.563 0.010365 *
org_any      -0.0713831   0.2524180  -0.283 0.777332
Q199_dicho   1.7862323   0.2563567   6.968 3.22e-12 ***
Q201_dicho   0.1498692   0.2325233   0.645 0.519229
Q202_dicho   0.7122121   0.3823974   1.862 0.062534 .
Q203_dicho  -0.0166361   0.2444867  -0.068 0.945750
Q204_dicho  -0.8371065   0.3704400  -2.260 0.023836 *
Q205_dicho  -0.0003388   0.2743062  -0.001 0.999015
Q206_dicho   0.6869823   0.3873456   1.774 0.076135 .
Q207_dicho   0.3448407   0.4277861   0.806 0.420182
Q215_dicho   0.1666559   0.2256065   0.739 0.460088
Q216_dicho   0.1904907   0.2323552   0.820 0.412316
Q240_dicho   0.1206498   0.2155502   0.560 0.575664
Q260_r       0.6095000   0.2138171   2.851 0.004364 **
Q275_r       0.0100817   0.1841489   0.055 0.956340
X003R2_r     0.0838715   0.1443828   0.581 0.561310
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
VarCorr(m_glmr_full)
Groups   Name              Std.Dev.
province (Intercept) 0.13034
library(lme4)
library(stargazer)

# --- Helper to safely extract random-intercept variance ---
safe_re_var <- function(mod, grp = "province") {
  if (lme4::isSingular(mod, tol = 1e-4)) return(0)
  vc <- lme4::VarCorr(mod)
  as.numeric(vc[[grp]][1, 1])
}

# Compute random-intercept variances (safe even if singular)
var_base <- safe_re_var(m_glmr_base, "province")
sd_base <- sqrt(var_base)

```

```

var_full <- safe_re_var(m_glmer_full, "province")
sd_full <- sqrt(var_full)

# Number of groups
groups_n <- length(unique(data_merged$province))

```

F.2 DV2 NA models

```

#Baseline NA-count models

library(lme4)

## Group A: Corruption NA (binary)
model_A_bin <- glmer(
  na_bin_A ~ level_dem +
    (1 | province),
  data = data_merged,
  family = binomial
)
summary(model_A_bin)
Generalized linear mixed model fit by maximum likelihood (Laplace
Approximation) [glmerMod]
Family: binomial ( logit )
Formula: na_bin_A ~ level_dem + (1 | province)
Data: data_merged

      AIC      BIC    logLik -2*log(L)  df.resid
1082.9   1097.6   -538.5   1076.9     1000

Scaled residuals:
   Min       1Q   Median       3Q      Max
-0.6057 -0.5429 -0.5429 -0.5234  1.9104

Random effects:
 Groups   Name      Variance Std.Dev.
 province (Intercept) 1.852e-13 4.303e-07
Number of obs: 1003, groups: province, 13

Fixed effects:
              Estimate Std. Error z value Pr(>|z|)
(Intercept) -0.92997    0.33183  -2.803  0.00507 **
level_dem    -0.07293    0.08220  -0.887  0.37495
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Correlation of Fixed Effects:
      (Intr)
level_dem -0.974
optimizer (Nelder-Mead) convergence code: 0 (OK)
boundary (singular) fit: see help('isSingular')
## Group B: Offline political action NA (binary)
model_B_bin <- glmer(
  na_bin_B ~ level_dem +
    (1 | province),
  data = data_merged,
  family = binomial
)
summary(model_B_bin)
Generalized linear mixed model fit by maximum likelihood (Laplace
Approximation) [glmerMod]
Family: binomial ( logit )
Formula: na_bin_B ~ level_dem + (1 | province)
Data: data_merged

```

AIC	BIC	logLik	-2*log(L)	df.resid
915.2	929.9	-454.6	909.2	1000

Scaled residuals:

Min	1Q	Median	3Q	Max
-0.6582	-0.4751	-0.4694	-0.3478	2.8749

Random effects:

Groups	Name	Variance	Std.Dev.
province	(Intercept)	0.2123	0.4608

Number of obs: 1003, groups: province, 13

Fixed effects:

	Estimate	Std. Error	z value	Pr(> z)
(Intercept)	-1.30211	0.55540	-2.344	0.0191 *
level_dem	-0.08084	0.15054	-0.537	0.5913

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Correlation of Fixed Effects:

```
(Intr)
level_dem -0.947
## Group C: Online political action NA (binary)
model_C_bin <- glmer(
  na_bin_C ~ level_dem +
  (1 | province),
  data = data_merged,
  family = binomial
)
```

summary(model_C_bin)

Generalized linear mixed model fit by maximum likelihood (Laplace Approximation) [glmerMod]
 Family: binomial (logit)
 Formula: na_bin_C ~ level_dem + (1 | province)
 Data: data_merged

AIC	BIC	logLik	-2*log(L)	df.resid
884.2	898.9	-439.1	878.2	1000

Scaled residuals:

Min	1Q	Median	3Q	Max
-0.7262	-0.4323	-0.4323	-0.3636	2.7502

Random effects:

Groups	Name	Variance	Std.Dev.
province	(Intercept)	4.788e-14	2.188e-07

Number of obs: 1003, groups: province, 13

Fixed effects:

	Estimate	Std. Error	z value	Pr(> z)
(Intercept)	-0.2939	0.3358	-0.875	0.382
level_dem	-0.3459	0.0859	-4.027	5.65e-05 ***

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Correlation of Fixed Effects:

```
(Intr)
level_dem -0.967
optimizer (Nelder_Mead) convergence code: 0 (OK)
boundary (singular) fit: see help('isSingular')
# Random-intercept variance
var_A <- as.numeric(VarCorr(model_A_bin)$province[1, 1])
```

```

var_B <- as.numeric(VarCorr(model_B_bin)$province[1, 1])
var_C <- as.numeric(VarCorr(model_C_bin)$province[1, 1])

# Random-intercept SD
sd_A <- sqrt(var_A)
sd_B <- sqrt(var_B)
sd_C <- sqrt(var_C)

# Number of provinces (same across models)
n_prov <- length(unique(data_merged$province))
## Group A: Corruption NA (binary) + control variables
model_A_bin_full <- glmer(
  na_bin_A ~ level_dem +
    org_any + Q199_dicho + Q201_dicho + Q202_dicho + Q203_dicho + Q204_dicho +
    Q205_dicho + Q206_dicho + Q207_dicho + Q208_dicho + Q215_dicho + Q216_dicho +
    Q240_dicho + Q260_r + Q275_r + X003R2_r +
    (1 | province),
  data = data_merged,
  family = binomial
)
summary(model_A_bin_full)
Generalized linear mixed model fit by maximum likelihood (Laplace
Approximation) [glmerMod]
Family: binomial ( logit )
Formula:
na_bin A ~ level dem + org any + Q199 dicho + Q201 dicho + Q202 dicho +
  Q203 dicho + Q204 dicho + Q205 dicho + Q206 dicho + Q207 dicho +
  Q208 dicho + Q215 dicho + Q216 dicho + Q240 dicho + Q260_r +
  Q275_r + X003R2_r + (1 | province)
Data: data_merged

           AIC          BIC      logLik -2*log(L)  df.resid
495.2       576.2      -228.6     457.2      506

Scaled residuals:
   Min       1Q   Median       3Q      Max
-0.9421 -0.4882 -0.3771 -0.2838  3.7716

Random effects:
 Groups Name Variance Std.Dev.
 province (Intercept) 5.877e-16 2.424e-08
Number of obs: 525, groups: province, 13

Fixed effects:
              Estimate Std. Error z value Pr(>|z|)
(Intercept) -0.67320    0.84831  -0.794  0.4274
level_dem   -0.18330    0.12827  -1.429  0.1530
org_any     -0.08814    0.27209  -0.324  0.7460
Q199_dicho -0.11813    0.27281  -0.433  0.6650
Q201_dicho -0.57260    0.25444  -2.250  0.0244 *
Q202_dicho  0.78587    0.51759   1.518  0.1289
Q203_dicho  0.03109    0.26951   0.115  0.9082
Q204_dicho -0.64527    0.43862  -1.471  0.1413
Q205_dicho  0.49181    0.31869   1.543  0.1228
Q206_dicho  0.48876    0.42230   1.157  0.2471
Q207_dicho -0.19851    0.46506  -0.427  0.6695
Q208_dicho  0.22657    0.35828   0.632  0.5271
Q215_dicho  0.06226    0.26131   0.238  0.8117
Q216_dicho  0.09582    0.26923   0.356  0.7219
Q240_dicho  0.36176    0.24441   1.480  0.1388
Q260_r     -0.08583    0.24241  -0.354  0.7233
Q275_r     -0.33207    0.22770  -1.458  0.1447
X003R2_r   -0.30152    0.16349  -1.844  0.0652 .

```

```

---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
optimizer (Nelder_Mead) convergence code: 0 (OK)
boundary (singular) fit: see help('isSingular')
## Group B: Offline political action NA (binary) + control variables
model_B_bin_full <- glmer(
  na_bin_B ~ level_dem +
    org_any + Q199_dicho + Q201_dicho + Q202_dicho + Q203_dicho + Q204_dicho +
    Q205_dicho + Q206_dicho + Q207_dicho + Q208_dicho + Q215_dicho + Q216_dicho +
    Q240_dicho + Q260_r + Q275_r + X003R2_r +
    (1 | province),
  data = data_merged,
  family = binomial
)
summary(model_B_bin_full)
Generalized linear mixed model fit by maximum likelihood (Laplace
Approximation) [glmerMod]
Family: binomial ( logit )
Formula:
na_bin_B ~ level_dem + org_any + Q199_dicho + Q201_dicho + Q202_dicho +
  Q203_dicho + Q204_dicho + Q205_dicho + Q206_dicho + Q207_dicho +
  Q208_dicho + Q215_dicho + Q216_dicho + Q240_dicho + Q260_r +
  Q275_r + X003R2_r + (1 | province)
Data: data_merged

           AIC          BIC      logLik -2*log(L)  df.resid
369.6         450.6      -165.8     331.6      506

Scaled residuals:
   Min       1Q   Median       3Q      Max
-0.8203 -0.3692 -0.2815 -0.2187  5.6699

Random effects:
 Groups   Name              Variance Std.Dev.
 province (Intercept)  0           0
Number of obs: 525, groups: province, 13

Fixed effects:
              Estimate Std. Error z value Pr(>|z|)
(Intercept) -0.05884    0.93961  -0.063  0.9501
level_dem   -0.19913    0.15069  -1.321  0.1864
org_any      0.05077    0.32914   0.154  0.8774
Q199_dicho  0.02875    0.34031   0.084  0.9327
Q201_dicho  -0.76109    0.31956  -2.382  0.0172 *
Q202_dicho  -0.26119    0.48957  -0.534  0.5937
Q203_dicho  0.07350    0.33242   0.221  0.8250
Q204_dicho  -0.72810    0.54654  -1.332  0.1828
Q205_dicho  -0.09240    0.39853  -0.232  0.8167
Q206_dicho  -0.82412    0.60120  -1.371  0.1704
Q207_dicho  0.96286    0.72496   1.328  0.1841
Q208_dicho  -0.01473    0.39395  -0.037  0.9702
Q215_dicho  0.31658    0.32323   0.979  0.3274
Q216_dicho  -0.15325    0.32566  -0.471  0.6379
Q240_dicho  0.07126    0.29964   0.238  0.8120
Q260_r      0.53563    0.30176   1.775  0.0759 .
Q275_r     -0.12659    0.28047  -0.451  0.6517
X003R2_r    -0.24425    0.20464  -1.194  0.2326

```

```

---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
optimizer (Nelder_Mead) convergence code: 0 (OK)
boundary (singular) fit: see help('isSingular')
## Group C: Online political action NA (binary) + control variables
model_C_bin_full <- glmer(

```

```

na_bin_C ~ level_dem +
  org_any + Q199_dicho + Q201_dicho + Q202_dicho + Q203_dicho + Q204_dicho +
Q205_dicho + Q206_dicho + Q207_dicho + Q208_dicho + Q215_dicho + Q216_dicho +
Q240_dicho + Q260_r + Q275_r + X003R2_r +
  (1 | province),
data = data_merged,
family = binomial
)
summary(model_C_bin_full)
Generalized linear mixed model fit by maximum likelihood (Laplace
Approximation) [glmerMod]
Family: binomial ( logit )
Formula:
na_bin_C ~ level_dem + org_any + Q199_dicho + Q201_dicho + Q202_dicho +
  Q203_dicho + Q204_dicho + Q205_dicho + Q206_dicho + Q207_dicho +
  Q208_dicho + Q215_dicho + Q216_dicho + Q240_dicho + Q260_r +
  Q275_r + X003R2_r + (1 | province)
Data: data_merged

```

AIC	BIC	logLik	-2*log(L)	df.resid
372.9	453.9	-167.4	334.9	506

```

Scaled residuals:
  Min       1Q   Median       3Q      Max
-1.0108 -0.3554 -0.3003 -0.2354  4.7440

```

```

Random effects:
 Groups   Name      Variance Std.Dev.
 province (Intercept) 0          0
Number of obs: 525, groups: province, 13

```

```

Fixed effects:
              Estimate Std. Error z value Pr(>|z|)
(Intercept) -0.005831   0.931192  -0.006  0.99500
level_dem    -0.449996   0.144943  -3.105  0.00191 **
org_any       0.107802   0.321228   0.336  0.73718
Q199_dicho   0.355589   0.333096   1.068  0.28573
Q201_dicho  -0.243700   0.316285  -0.771  0.44100
Q202_dicho   0.073027   0.583614   0.125  0.90042
Q203_dicho   0.076430   0.338236   0.226  0.82123
Q204_dicho  -0.217731   0.541634  -0.402  0.68769
Q205_dicho   0.266781   0.397430   0.671  0.50205
Q206_dicho  -0.343569   0.582344  -0.590  0.55521
Q207_dicho   0.316357   0.649962   0.487  0.62645
Q208_dicho  -0.363406   0.408494  -0.890  0.37367
Q215_dicho   0.308761   0.326123   0.947  0.34376
Q216_dicho  -0.038398   0.329729  -0.116  0.90729
Q240_dicho  -0.310357   0.300275  -1.034  0.30134
Q260_r       0.180027   0.296266   0.608  0.54342
Q275_r       0.266363   0.229605   1.160  0.24601
X003R2_r    -0.326499   0.204123  -1.600  0.10971
---

```

```

Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
optimizer (Nelder_Mead) convergence code: 0 (OK)
boundary (singular) fit: see help('isSingular')

```

F.3 Robustness Checks

```

# Single-level logits (DV1)
#| warning: false
#| message: false

modell_talk_glm <- glm(Q200_dicho ~ level_dem,

```

```

      data = data_merged,
      family = binomial)

model2_talk_glm <- glm(
  Q200_dicho ~ level_dem +
    org_any +
    Q199_dicho +
    Q201_dicho + Q202_dicho + Q203_dicho + Q204_dicho + Q205_dicho + Q206_dicho
+ Q207_dicho +
  Q215_dicho + Q216_dicho +
  Q260_r + Q275_r + X003R2_r,
  data = data_merged,
  family = binomial
)
summary(model2_talk_glm)

```

Call:

```

glm(formula = Q200_dicho ~ level_dem + org_any + Q199_dicho +
  Q201_dicho + Q202_dicho + Q203_dicho + Q204_dicho + Q205_dicho +
  Q206_dicho + Q207_dicho + Q215_dicho + Q216_dicho + Q260_r +
  Q275_r + X003R2_r, family = binomial, data = data_merged)

```

Coefficients:

	Estimate	Std. Error	z value	Pr(> z)	
(Intercept)	-2.43875	0.63319	-3.852	0.000117	***
level_dem	0.27654	0.11067	2.499	0.012467	*
org_any	-0.07413	0.21528	-0.344	0.730577	
Q199_dicho	1.73606	0.22955	7.563	3.94e-14	***
Q201_dicho	0.10949	0.20572	0.532	0.594559	
Q202_dicho	0.46156	0.33278	1.387	0.165444	
Q203_dicho	0.14951	0.21341	0.701	0.483574	
Q204_dicho	-0.50910	0.31712	-1.605	0.108400	
Q205_dicho	-0.01856	0.24912	-0.074	0.940626	
Q206_dicho	0.41949	0.33249	1.262	0.207065	
Q207_dicho	0.43534	0.37682	1.155	0.247964	
Q215_dicho	0.20097	0.20286	0.991	0.321849	
Q216_dicho	0.24689	0.20742	1.190	0.233925	
Q260_r	0.50116	0.19026	2.634	0.008436	**
Q275_r	-0.01736	0.17238	-0.101	0.919799	
X003R2_r	0.08713	0.12736	0.684	0.493895	

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

(Dispersion parameter for binomial family taken to be 1)

```

Null deviance: 815.88 on 623 degrees of freedom
Residual deviance: 677.51 on 608 degrees of freedom
(379 observations deleted due to missingness)
AIC: 709.51

```

Number of Fisher Scoring iterations: 4

```

# Any NA on sensitive items (DV2 combined)
#| warning: false
#| message: false

```

```

model_NA_combined <- glmer(
  na_any ~ level_dem + (1 | province),
  data = data_merged,
  family = binomial,
  control = glmerControl(optimizer = "bobyqa", optCtrl = list(maxfun = 2e5))
)
boundary (singular) fit: see help('isSingular')
summary(model_NA_combined)

```

```

Generalized linear mixed model fit by maximum likelihood (Laplace
Approximation) [glmerMod]
Family: binomial (logit)
Formula: na_any ~ level_dem + (1 | province)
Data: data_merged
Control: glmerControl(optimizer = "bobyqa", optCtrl = list(maxfun = 2e+05))

```

AIC	BIC	logLik	-2*log(L)	df.resid
1338.7	1353.5	-666.4	1332.7	1000

```

Scaled residuals:
  Min      1Q  Median      3Q      Max
-1.0712 -0.7935 -0.7180  1.2602  1.3927

```

```

Random effects:
 Groups   Name      Variance Std.Dev.
 province (Intercept) 0          0
Number of obs: 1003, groups: province, 13

```

```

Fixed effects:
              Estimate Std. Error z value Pr(>|z|)
(Intercept)  0.33749    0.29104   1.160  0.2462
level_dem    -0.20000    0.07205  -2.776  0.0055 **
---

```

```

Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

```

Correlation of Fixed Effects:

```

```

      (Intr)
level_dem -0.975

```

```

optimizer (bobyqa) convergence code: 0 (OK)

```

```

boundary (singular) fit: see help('isSingular')

```

```

model_NA_combined_2 <- glmer(
  na_any ~ level_dem +
    org_any +
    Q199_dicho +
    Q201_dicho + Q202_dicho + Q203_dicho + Q204_dicho + Q205_dicho + Q206_dicho
+ Q207_dicho +
    Q215_dicho + Q216_dicho +
    Q260_r + Q275_r + X003R2_r +
    (1 | province),
  data = data_merged,
  family = binomial,
  control = glmerControl(optimizer = "bobyqa", optCtrl = list(maxfun = 2e5))
)

```

```

boundary (singular) fit: see help('isSingular')

```

```

summary(model_NA_combined_2)

```

```

Generalized linear mixed model fit by maximum likelihood (Laplace
Approximation) [glmerMod]

```

```

Family: binomial (logit)

```

```

Formula: na_any ~ level_dem + org_any + Q199_dicho + Q201_dicho + Q202_dicho +
  Q203_dicho + Q204_dicho + Q205_dicho + Q206_dicho + Q207_dicho +
  Q215_dicho + Q216_dicho + Q260_r + Q275_r + X003R2_r + (1 | province)

```

```

Data: data_merged

```

```

Control: glmerControl(optimizer = "bobyqa", optCtrl = list(maxfun = 2e+05))

```

AIC	BIC	logLik	-2*log(L)	df.resid
771.3	846.7	-368.6	737.3	609

```

Scaled residuals:
  Min      1Q  Median      3Q      Max
-1.3618 -0.6957 -0.5174  1.0595  2.7963

```

```

Random effects:

```

```

Groups   Name          Variance Std.Dev.
province (Intercept) 5.436e-28 2.331e-14
Number of obs: 626, groups: province, 13

```

Fixed effects:

	Estimate	Std. Error	z value	Pr(> z)
(Intercept)	1.13023	0.59574	1.897	0.057804 .
level_dem	-0.15554	0.10194	-1.526	0.127057
org_any	-0.15466	0.20202	-0.766	0.443950
Q199_dicho	0.04018	0.20282	0.198	0.842980
Q201_dicho	-0.64943	0.19368	-3.353	0.000799 ***
Q202_dicho	0.36160	0.32990	1.096	0.273045
Q203_dicho	-0.23313	0.20070	-1.162	0.245407
Q204_dicho	-0.62876	0.31887	-1.972	0.048626 *
Q205_dicho	0.37459	0.24071	1.556	0.119653
Q206_dicho	-0.20466	0.32364	-0.632	0.527136
Q207_dicho	0.30483	0.37575	0.811	0.417222
Q215_dicho	0.26620	0.19796	1.345	0.178722
Q216_dicho	-0.14706	0.20169	-0.729	0.465915
Q260_r	-0.21672	0.18155	-1.194	0.232582
Q275_r	-0.18751	0.16834	-1.114	0.265329
X003R2_r	-0.31985	0.12186	-2.625	0.008674 **

```

---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

```

Correlation matrix not shown by default, as p = 16 > 12.
Use print(x, correlation=TRUE) or
      vcov(x)          if you need it
optimizer (bobyqa) convergence code: 0 (OK)
boundary (singular) fit: see help('isSingular')

```

F.4 Predicted probabilities with observed-case approach

```

# DV1 predicted probability across SDI
pp_talk <- ggpredict(m_glmmer_full, terms = "level_dem [1:5]")
You are calculating adjusted predictions on the population-level (i.e.
`type = "fixed"`) for a *generalized* linear mixed model.
This may produce biased estimates due to Jensen's inequality. Consider
setting `bias_correction = TRUE` to correct for this bias.
See also the documentation of the `bias_correction` argument.
ggplot(pp_talk, aes(x = x, y = predicted)) +
  geom_line(linewidth = 1) +
  geom_point(size = 2) +
  geom_ribbon(aes(ymin = conf.low, ymax = conf.high), alpha = 0.3) +
  scale_y_continuous(labels = scales::percent_format(accuracy = 1)) +
  labs(x = "Subnational Democracy (SDI)",
       y = "Predicted probability of talking about politics",
       title = "Predicted Probability of Political Conversation by SDI") +
  theme_minimal(base_size = 14)

```

```

# DV2 predicted probability across SDI
library(scales)

```

```

Attaching package: 'scales'
The following object is masked from 'package:purrr':

```

```

  discard
The following object is masked from 'package:readr':

```

```

  col_factor
# Predicted probabilities by SDI level (observed-case approach)
pp_A <- ggpredict(model_A_bin_full, terms = "level_dem [1:5]")
pp_B <- ggpredict(model_B_bin_full, terms = "level_dem [1:5]")

```

```

pp_C <- ggpredict(model_C_bin_full, terms = "level_dem [1:5]")

# Add group labels
pp_A$group <- "Corruption"
pp_B$group <- "Offline political action"
pp_C$group <- "Online political action"

# Combine predictions
pp_all <- bind_rows(pp_A, pp_B, pp_C)

# Plot
ggplot(pp_all, aes(x = x, y = predicted)) +
  geom_line(linewidth = 1, color = "grey30") +
  geom_point(size = 2, color = "grey30") +
  geom_ribbon(
    aes(ymin = conf.low, ymax = conf.high),
    fill = "grey70",
    alpha = 0.4
  ) +
  facet_wrap(~ group) +
  scale_y_continuous(
    labels = percent_format(accuracy = 1),
    limits = c(0, NA)
  ) +
  labs(
    x = "Subnational Democracy (SDI)",
    y = "Predicted probability of nonresponse",
    title = "Predicted Nonresponse to Sensitive Items by SDI and Item Group"
  ) +
  theme_minimal(base_size = 12)

```

Appendix G

G.1 Research Origins and Design Evolution

This research initially aimed to construct a composite Self-Censorship Index using Principal Component Analysis (PCA) based on selected items from the World Values Survey (Wave 7). The goal was to capture self-censorship as a multidimensional and continuous phenomenon, allowing for variation in intensity and expression across individuals.

After selecting the relevant survey items and conducting exploratory PCA, this operationalization was ultimately not pursued. While a composite index has the advantage of representing self-censorship as a gradient and of integrating multiple behavioral dimensions, the structure and content of the WVS items were not well suited for this purpose. In particular, the items in the survey are not targeted specifically to measure this behavior in depth.

As a result, the research design shifted toward alternative operationalizations that more directly reflect observable forms of self-censorship within the available data. This decision prioritized measurement validity and interpretability over index construction, and it informed the final focus on conversational self-censorship and survey nonresponse to sensitive items.

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