Secularization Backlash: A Tale of Two Coups*

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Abstract

This paper examines how past ideological state-building constrains future reform. In Pakistan, General Zia's regime (1977–1988) embedded religious identity into law, education, and political life. Two decades later, General Musharraf (1999–2008) sought to reverse course by pursuing a competing vision of national renewal. Leveraging a newly assembled district-level panel spanning half a century and an array of difference-in-differences strategies, we show that liberalizing reforms under Musharraf triggered a severe backlash in districts previously Islamized by Zia's policies, reflected in heightened political violence and rising electoral support for Islamist parties. Evidence supports a mechanism in which Zia's Islamization increased exposure to religious extremism among school-age cohorts. Relative to earlier cohorts, these cohorts were more likely to attend *madrasas* (religious seminaries) teaching more hardline religious doctrine. The districts that later display backlash also exhibit higher early marriage rates among girls, slower gains in female literacy, and greater Qur'an readership, consistent with a reorientation toward more conservative social and political preferences. These findings suggest that when states fuse Islamist ideology with governance, they create enduring constraints on future policy change. Past ideological investments can thus limit the effectiveness of later efforts at secularization or reform.

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"Pakistan, which was created in the name of Islam, will continue to survive only if it stays with Islam."

General Zia-ul-Haq

"We are an Islamic state. However, that does not at all mean that it is a theocratic state. Quaid-e-Azam declared that Pakistan belonged to followers of all religions."

General Pervez Musharraf

1 Introduction

In many parts of the Global South, state-led nation-building projects grounded in modernization and secularization have triggered intense, and sometimes violent, resistance. While modernizing elites often frame these reforms as necessary for development, cohesion, or international legitimacy, societal responses vary widely (Cantoni et al., 2018; Jha and Shayo, 2019; Koyama and Rubin, 2022). In Turkey, for instance, Atatürk's abolition of the caliphate and restrictions on Islamic dress provoked cultural and political battles that endure to this day (Benzer and Tukiainen, 2025). In Iran under the Shah, top-down secularization and Westernizing reforms generated resentment that ultimately helped fuel the 1979 Islamist revolution (Axworthy, 2013). By contrast, in countries such as Senegal or Indonesia, elements of secular reform were integrated into existing political and cultural structures with relatively less social conflict, producing hybrid arrangements that softened confrontation (Buckley, 2017; Hasyim, 2019). Why do some secularization efforts provoke violent backlash, while others are absorbed into the political and cultural fabric of the state?

This paper explores that question through a rare natural contrast in Pakistan: two military regimes that pursued opposing visions of nationhood. After gaining independence in 1947, Pakistan was established as a Muslim-majority homeland, but not a theocracy. Its early constitutional order upheld secular parliamentary democracy; courts operated under British common law; alcohol remained legally available; religious minorities held public office; and state policy was shaped more by postcolonial development priorities than religious doctrine. From independence in 1947 through the 1970s, Pakistan functioned as a relatively secular polity, even as it anchored its identity in Islam (Khan, 2001; Paracha, 2013; Jalal, 2014).

This balance shifted decisively in 1977, when General Zia-ul-Haq seized power through a military coup and launched a far-reaching Islamization project. Framing Islam as the cornerstone of national identity, the regime reoriented Pakistan's nation-building agenda around religious ideology. Islamic injunctions were infused into the legal system, public school curricula were rewritten to reflect a narrow vision of religious virtue, and state resources were channeled into the expansion of religious seminaries (henceforth, madrasas). These reforms aimed to construct a new ideological framework in which citizenship, loyalty, and national belonging became defined through a particular interpretation of Islam. Over time, this agenda produced a parallel educational order centered on madrasas, which provided rigid religious instruction that harkened back to a medieval and obscurantist version of Islam. The state's effort to forge national cohesion through Islam thus laid the foundation for enduring contestation over who holds authority, how citizenship is defined, and how religion should structure public life (Burki, 1991; Cohen, 2004; Malik and Tudor, 2024).

Two decades later, another military ruler, General Pervez Musharraf, sought to reverse this trajectory. Having spent his formative years in Turkey and openly admiring Mustafa Kemal Atatürk, the founder of secular Turkey, Musharraf envisioned a modernizing, state-led reform agenda that attempted to reverse the course of Zia-era Islamization (Musharraf, 2006). After his 1999 coup, he promoted a new nation-building program of "enlightened moderation," relaxing restrictions on cultural expression, reducing clerical influence in public life, and advancing a version of Islam more compatible with global liberal norms. Unlike Zia's project, Musharraf's reforms met with intense backlash, manifested in rising unrest and a strengthening of Islamist political forces, which were most pronounced in areas previously shaped by the ideological and institutional legacies of Islamization.

This paper argues that the divergent outcomes of Zia's Islamization and Musharraf's "enlightened moderation" are linked and can be understood through policy-induced path dependence. Drawing on a sub-national panel spanning half a century and employing a difference-in-differences strategy, we find that Musharraf's reforms are associated with sharp increases in political violence and electoral support for Islamist parties, but primarily in districts with large Pashtun populations. Pashtun communities had formed the backbone of Zia's Islamization programme. As co-ethnics of the Afghan *mujahideen* (Islamist guerrilla fighters) resisting the Soviet occupation of Afghanistan, they could be readily mobilized in support of the Afghan *jihad*, which was one of Zia's central foreign-policy objectives. This made Pashtun-majority districts focal points of the state's Islamization efforts. Madrasa education served as the principal vehicle for this transformation, functioning both as instruments of ideological indoctrination and as organizational nodes that linked local Pashtun communities to the transnational jihadist networks fostered by Zia's regime (ICG, 2002;

Adamski, 2009; Nawaz, 2011). When Musharraf attempted to reverse aspects of this legacy, these same districts became epicentres of backlash.

We document four main findings. First, using a difference-in-differences design, we show that districts with greater exposure to General Zia-ul-Haq's Islamization, proxied by the share of ethnic Pashtuns or coethnics of Afghan 'jihad' fighters, later exhibited a pronounced backlash when General Pervez Musharraf attempted to reverse course through his program of "enlightened moderation." In these districts, both political violence and electoral support for Islamist parties increased sharply: political violence increased by about 25%, and Islamist parties gained roughly 10% in vote shares.

Second, this divergence cannot be explained by pre-existing differences in high versus low Pashtun districts. Districts with higher Pashtun shares show no differential changes in political violence or Islamist votes in the decades prior to Zia's rule, nor for several decades thereafter. The gap between high- and low-Islamized districts emerges only once Musharraf initiates his secularization program, suggesting that the backlash was specifically triggered by the attempt to reverse an entrenched ideological trajectory that had taken root under Zia's Islamization. That backlash emerges most strongly in districts with greater exposure to Zia-era Islamization suggests that these policies left lasting local imprints, which remained dormant until challenged by a shift toward secularization.

Third, we provide evidence for a mechanism linking Zia's Islamization to the subsequent backlash under Musharraf. A central feature of Zia's program was the systematic targeting of Pashtun-majority districts for the rapid expansion of madrasas. Pakistan's Pashtuns shared close ethnic ties with Afghan *mujahideen* groups resisting the Soviet occupation in the early 1980s, making them ideal targets for Islamist indoctrination aimed at mobilizing support for the Afghan *jihad*. To test whether this effort translated into greater Islamist schooling, we use individual-level survey data across decades to estimate a triple-difference model where the outcome is enrolment in a madrasa, and the key interaction term combines (i) Pashtun ethnicity, (ii) residence in a Pashtun-majority district, and (iii) exposure to Zia's Islamization during school age, when schooling and madrasa choices are made. The triple-difference specification absorbs all two-way interactions of ethnicity, location, and cohort, so identification comes from differential changes for school-age Pashtuns in Pashtun-majority districts during Zia. Put differently, we compare within-cohort differences across ethnic groups and districts before versus during Zia, which provides a direct test of whether the targeted populations experienced a relative shift toward Islamist schooling. The coefficient on the triple interaction is positive and precisely estimated, indicating that Pashtuns living in Pashtun-majority areas became relatively more likely to enroll in madrasas during Zia's Islamization. This supports the interpretation that Zia's Islamization deepened religious

indoctrination among cohorts targeted for ideological mobilization, laying the foundation for the later backlash observed under Musharraf's secularization efforts.

Last, we present evidence of long-run ideological shifts in the Pashtun-majority areas targeted by Zia's Islamization that further corroborate this mechanism. Using a district-level panel spanning more than half a century, we show that districts with larger Pashtun populations experienced sharper declines in female literacy for school-age cohorts and higher rates of early marriage among women over time, but not prior to Zia's Islamization. These same areas also experienced increases in religious engagement in the post-Zia period, as proxied by higher levels of Quran readership. Combined with the rise in madrasa enrolment, these patterns indicate that Zia's Islamization program fostered enduring ideological and social transformations. In essence, Zia's project of religious nation-building, anchored in a fundamentalist interpretation of Islam, likely created lasting ideological commitments that undermined subsequent attempts at reversing course. More broadly, our results highlight a deeper political dynamic: when states instrumentalize religion to forge national identity, they risk entrenching beliefs that render even modest secular reform politically untenable.

We also probe whether the post-1999 backlash could be generated by channels other than the ideological and educational legacies of Islamization. In particular, we assess whether the divergence reflects a generic tendency toward Pashtun ethnic mobilization after any military coup, a disproportionate post-1999 escalation in counterinsurgency operations, or differential changes in human capital, urbanization, or electoral participation. The evidence is not consistent with these alternatives: these factors do not align with the timing or concentration of the backlash. The pattern instead accords with a response to the attempted rollback of a religious order that became institutionalized under Zia.

We conduct a range of robustness checks to validate our central finding of a post-Musharraf backlash to Zia's Islamization. First, we find no evidence of differential pre-trends between high and low Pashtun districts before Zia's 1977 coup for either of our two outcomes: political violence and Islamist vote share. Second, we show that, before Zia's Islamization, Pashtun-majority districts do not appear systematically different from other districts along key ideological and socio-demographic margins: high-Pashtun districts are no more likely to exhibit greater religious engagement, as proxied by readership of the holy Quran, and they display similar levels of female school-age literacy, early-age marriage among women, and madrasa enrolment compared to low-Pashtun districts. Third, the results remain stable when controlling flexibly for a range of baseline district characteristics and interacting them with year fixed effects to absorb differential trends in observable covariates. Fourth, we apply the Callaway et al. (2024) estimator that has been recommended for continuous treatments in difference-in-differences designs. Results remain stable across this more flexible framework.

Fifth, to assess the robustness of our inference to alternative clustering and spatial correlation, we re-estimate our models using Conley (2008) standard errors to account for spatially correlated shocks, implement Wild Cluster Bootstrap procedures following Cameron et al. (2008) to validate significance levels given a finite number of clusters, and verify that results remain consistent when clustering is conducted at higher administrative levels. Sixth, to evaluate whether our findings are driven by specific years or regions, we conduct a series of leave-one-out exercises. We sequentially re-estimate our main specification while excluding each year from the sample, and then repeat the procedure by dropping one region at a time. The resulting estimates show no evidence that the results are disproportionately influenced by any single year or region. Seventh, we implement random inference exercises that scramble the spatial distribution of treatment assignment and show that this produces null effects, supporting the claim that our observed patterns are not due to chance. Finally, to address specific concerns about applying log-like transformations when outcomes take zero values, as is the case with our measure of political violence, we follow the advice in Chen and Roth (2024) and implement a series of tests. First, we re-estimate our models using alternative transformations of the political violence variable to assess the robustness of our results to functional form choices. Next, we explicitly calibrate the relative weight of the intensive and extensive margins in our main specification, allowing us to account for the zero-inflated nature of the outcome without biasing the estimates. Finally, we report Poisson pseudo maximum likelihood (PPML) estimates, which provide consistent and robust results for non-negative, zero-inflated, and heteroskedastic data, and avoid the bias and information loss associated with log-transformations. These checks strengthen our central finding that Zia's state-led religious nation-building locked in beliefs and institutions that made later attempts at even partial secular reform under Musharraf untenable.

1.1 Related Literature

This paper contributes to several strands of literature. First, it engages with the scholarship on nation-building. A substantial body of work shows that state-led interventions, particularly through education, bureaucracy, and development programs, can foster national integration and reduce conflict (Alesina et al., 2021; Rohner and Zhuravskaya, 2024; Assouad, 2025; Beath et al., 2025; Caprettini and Voth, 2023). Yet a growing literature also documents the conditions under which such efforts backfire, especially when they are ideologically driven, clash with entrenched identities, or fail to account for historical path dependencies. For instance, prior work has shown how reforms such as language mandates (Fouka, 2020a), propaganda campaigns (DellaVigna et al., 2014; Blumenstock et al., 2022), and education

reforms (Bazzi et al., 2025; Squicciarini, 2020; Carvalho et al., 2024; Cinnirella and Schueler, 2018) can provoke backlash when they conflict with existing group identities. Similarly, secularization policies have been found to elicit resistance when perceived as existential threats to religious belief or ideology (Juergensmeyer, 2003; Iannaccone, 1998; Carvalho, 2013; Sakalli, 2019). This paper brings these strands together by showing that when religion is embedded in state policy, it not only reshapes contemporary political and social life but also creates durable constraints on future reforms, such that subsequent attempts at secularization can trigger both violent resistance and lasting ideological retrenchment. Specifically, we show how General Zia's Islamization embedded constraints that later limited the scope for General Musharraf's secularization reforms. Rather than existing in isolation, these two regimes were ideologically intertwined; the secular backlash under Musharraf was catalysed by the prior Islamization under Zia. We also speak to the political economy of institutional reform in weak and authoritarian regimes: while reforms such as legal secularization or liberal media expansion are often viewed as democratizing, our findings suggest that sequencing and ideological coherence are critical, since inconsistent nation-building strategies can backfire by empowering prior coalitions and deepening societal cleavages (Slater, 2010; Scott, 2009; Gethin et al., 2022).

Second, this paper contributes to the "persistence" literature. A central insight from this work is that ideologically motivated policies, whether colonial extractions, education reforms, or propaganda, can leave enduring marks on political beliefs and behaviour. For example, extractive colonial institutions and coercive labour regimes have been shown to shape development outcomes over centuries (Acemoglu et al., 2001; Nunn, 2008; Lowes and Montero, 2021; Valencia Caicedo, 2019). State control over education has been used to entrench dominant ideologies, with persistent effects on beliefs and state-society relations (Cantoni et al., 2017; Blanc and Kubo, 2024; Bandiera et al., 2019). Evidence suggests that propaganda systems such as radio broadcasting can shape mass mobilization and contribute to violence (Yanagizawa-Drott, 2014; Adena et al., 2015). Similar effects have been observed with other cultural media, including film (Ang, 2023; Esposito et al., 2023), and literature (Avetian and Mehmood, 2025). We build on these findings by showing that religious indoctrination under General Zia generated ideological commitments that persisted for decades and later constrained secular reform efforts under General Musharraf. Our results highlight how historically rooted ideological interventions shape subsequent political conflict by narrowing the space for policy reversals. While recent work has raised concerns about time-varying persistence and the difficulty of attributing long-run outcomes to distant interventions (see for instance—Ochsner and Roesel (2024); Fouka (2020a); Ferraz et al. (2024)), our district-level panel spanning half a century allows us to trace several outcomes that reflect ideological

beliefs and identify moments when these legacies became politically salient.

The remainder of the paper proceeds as follows. Section 2 discusses the historical context of both coups and outlines the contrasting ideological programmes pursued by Zia and Musharraf. Section 3 describes the data and empirical strategy. Section 4 presents the main results on political violence and religious mobilization. Section 5 explores mechanisms, including madrasa proliferation, religious engagement, female education and early-age marriage, and social attitudes toward out-groups. Section 6 demonstrates the robustness of our findings to alternative specifications, inference methods, and sample restrictions. Section 7 concludes.

2 Historical Background

2.1 Colonial Foundations and Independence of Pakistan

Pakistan's institutional foundations were shaped by its colonial heritage. British rule introduced centralized governance structures, common law institutions, and a bureaucratic-military elite, all of which remained largely intact after independence in 1947. Yet this legal-institutional framework was fundamentally secular in design, while the very demand for Pakistan's creation had been framed in religious terms. This unresolved tension between secular law and Islamic identity would persist throughout Pakistan's post-colonial history, fueling ideological contestation over the country's political and constitutional direction.

In the early decades after independence, this contradiction played out in recurring debates over the role of Islam in governance. Islamic political parties, such as Jamaat-e-Islami and Jamiat Ulema-e-Islam, consistently pushed for the establishment of an Islamic state, while secular elites—many of them products of the colonial administrative tradition—sought to preserve the inherited legal and bureaucratic structures. The 1956 Constitution attempted a symbolic compromise by declaring Pakistan an "Islamic Republic," but it left the core tension between religious and secular authority unresolved. The military regime of Ayub Khan (1958–1969) deepened these divisions by aggressively promoting secular modernization, further alienating religious forces who saw the state as drifting from its founding ideals.

By the 1970s, this prolonged ideological struggle had created favorable conditions for a stronger role of religion in formal politics. The 1973 Constitution, crafted under Prime Minister Zulfikar Ali Bhutto, again attempted to balance competing visions, declaring Islam the state religion while retaining secular legal and administrative frameworks. This half-measure satisfied neither Islamists nor secularists, and the resulting discontent reached a climax in 1977, when religious parties mobilized mass protests under the banner of *Nizam-e-Mustafa*

(Islamic Order), demanding full Islamization. The political crisis that followed set the stage for General Zia-ul-Haq's military coup, which promised to finally reconcile Pakistan's secular institutions with its Islamic identity—marking a decisive turn in the country's ideological trajectory.

2.2 The 1977 Military Coup: General Zia and Islamization

General Zia-ul-Haq seized power in a military coup in 1977, overthrowing the democratically elected government of Prime Minister Zulfikar Ali Bhutto, whose Pakistan Peoples Party (PPP) had won a landslide victory in the general elections earlier that year. Shortly after assuming power, Zia launched a far-reaching Islamization program under the slogan *Nizam-i-Islam*. Central to this program were the Hudood Ordinances, which sought to align Pakistan's penal system with Islamic principles. These laws disproportionately affected women by institutionalizing gender discrimination and restricting their access to justice. For instance, the *Qanoon-e-Shahadat* (Islamic Law of Evidence) reduced a woman's testimony to half the value of a man's; the *Zina-bil-Jabr* (Rape) Ordinance made convictions nearly impossible by requiring either a confession from the accused or testimony from four salah (morally upright) adult Muslim men; and the *Qisas and Diyat* Ordinance enabled honor killings by allowing the victim's heirs—often the perpetrators themselves—to pardon the crime.

Alongside the *Hudood* Ordinances, Zia's administration introduced judicial reforms that further entrenched the role of Islamic law within Pakistan's legal system and curtailed the influence of secular jurisprudence. These reforms included the creation of a Federal Shariat Court and lower *qazi* courts (Islamic courts at the provincial and district levels), the establishment of Shariat Appellate Benches within the high courts, and, most significantly, the empowerment of courts to review legislation for "repugnancy to Islam." Citizens were also granted the right to file "Shariat petitions," enabling individuals to challenge existing laws on religious grounds. These measures significantly expanded the role of religion in legal interpretation and enforcement, weakening the separation between religious authority and state law.

Zia's Islamization program also extended to the education system, which was restructured to advance his Islamist agenda. Central to this effort was the massive expansion of the madrasa network, funded not only through Islamic taxes such as *zakat* and *ushr*, which were formally institutionalized under Zia, but also through substantial external support from Saudi donors, charities, and Islamic non-governmental organizations. This external funding, driven in part by Saudi Arabia's strategic interest in exporting its *Wahhabi* interpretation of

Islam and countering the regional influence of post-revolutionary Iran, played a significant role in shaping the doctrinal orientation of Pakistani religious seminaries during this period. Alongside the expansion of madrasas, compulsory courses in Qur'anic studies and Islamiyat were introduced across all levels of formal education, school curricula were revised to reflect Islamic teachings, thousands of mosque-based schools were established, and the National Committee for Dini Madaris was created to integrate religious seminaries into the national education framework. These reforms played a central role in the religious socialization and, in many cases, radicalization of Pakistani youth, helping to transform them into a key constituency of political Islam.

Zia's Islamization and the Pashtuns.—Among the groups most profoundly affected by Zia's Islamization program were the Pashtuns. The expansion of the madrasa network was particularly pronounced in Pashtun-majority areas along Pakistan's northwestern frontier with Afghanistan. This targeting was strategic, unfolding in the context of the Soviet–Afghan war (1979–1989). As Pakistan under Zia emerged as a key frontline ally of the United States in supporting the Afghan jihad, the Pashtuns were prioritized because of their close ethnic and tribal ties to the Mujahideen resisting the Soviet occupation and their geographic proximity to Afghanistan (Ghattas, 2020; Nawaz, 2011). As Nawaz (2011, p. 5) notes, the war "created the base for the recruitment of religious warriors," with resources channelled through Pakistan's security establishment to "exhort and train the tribal warriors in the name of Islam," while religious schools became central "breeding grounds" for this effort. Nawaz further observes (p. 6) that by the time the war ended and the Soviets exited Afghanistan, "religion had become a major political and social force" in the region, and that under Zia, religious leaders were increasingly permitted to "supplant the traditional tribal maliks," reshaping local authority structures in a decisively Islamist direction. Consequently, this region became more receptive to Zia's radicalization efforts channelled through the expanding madrasa network.

Several pieces of descriptive evidence highlight this trend. Between 1980 and 1986, the number of registered madrasas nationwide rose from roughly 700 to about 7,000, with the majority located in the Pashtun-dominated Khyber Pakhtunkhwa province (Adamski, 2009). Subsequent evidence confirms the persistence of this concentration. Andrabi et al. (2006), analyzing the 1998 Population Census, found that all ten districts with the highest share of children enrolled in madrasas were situated in the Pashto-speaking belt. They also identified 14 districts where madrasa enrolment exceeded 2 percent of total enrolment—a threshold they classify as "extreme" enrolment—and all of these districts lay in Pashtun-dominated areas bordering Afghanistan. More recently, a 2017 Pakistan Institute for Peace Studies (PIPS) survey reported that 76 percent of madrasa students in its sample came from Khyber

Pakhtunkhwa and the adjoining tribal areas, compared to only 18 percent from Punjab (PIPS, 2017).

With substantial financial and ideological backing from Saudi Arabia, along with significant support from the U.S., these madrasas became the ideological training grounds for a whole generation of young Pashtuns. However, this geographic concentration should not be misinterpreted as evidence of an *a priori* inherent religiosity or cultural preference among Pashtuns for religious schooling. There is no *a priori* reason to think that Pashtun households are more likely to send their children to madrasas compared to non-Pashtuns. The Andrabi et al. (2006) study documents an important finding in this regard. It shows that the differences in madrasa enrolment between Pashtun and non-Pashtun districts does not extend to Pashtun and non-Pashtun households, suggesting that geopolitical factors and cross-border Pashtun linkages, rather than any inherent cultural or religious traits, drove these patterns.

2.3 Interim Democratic Period

Following Zia's death in 1988, Pakistan experienced alternating civilian governments led by the Pakistan People's Party (PPP) and the Pakistan Muslim League (PML). Despite this nominal return to democracy, the military continued to exert considerable influence over security and foreign policy. Efforts at legal reform during these periods were limited, and Zia's legacy of Islamization remained largely intact. The judiciary was not fully depoliticized, and democratic institutions remained weak, making the country vulnerable to further authoritarian interventions.

2.4 The 1999 Military Coup: General Musharraf and Enlightened Moderation

In 1999, General Pervez Musharraf led a military coup that ousted the democratically elected government of the Pakistan Muslim League (PML), headed by Prime Minister Nawaz Sharif, which had come to power in the 1997 general elections. Unlike Zia, Musharraf presented himself as a reformist and liberalizing autocrat. His policy of "enlightened moderation" aimed to reverse elements of Zia's Islamization. The clearest articulation of this policy appeared in a 2004 Washington Post article, where Musharraf argued:

> *"We must adopt a path of moderation and a conciliatory approach to fight the common belief that Islam is a religion of militancy in conflict with modernization, democracy and secularism" (Musharraf, 2004)*

At its core, enlightened moderation sought to rebrand Pakistan as a progressive and moderate Muslim nation through a combination of domestic reforms and international engagement. Key initiatives included expanding the political representation of women and religious minorities through reserved seats in parliament, passing the Protection of Women Act (2006)—which amended the controversial Hudood Ordinances to strengthen legal protections for women—and liberalizing the electronic media landscape by licensing private TV channels. The state also promoted cultural activities such as dance, music, and theatre through institutions like the National Academy of Performing Arts and the National Council of the Arts.

However, the most controversial components of Musharraf's reform agenda were his efforts to curb religious extremism. These measures included banning militant religious organizations, implementing registration and curriculum reforms for madrasas, and prohibiting mosques from delivering politically charged sermons. Though intended to stem radicalization, these initiatives provoked fierce backlash. Religious leaders and clerics denounced the reforms as assaults on Islamic principles and religious autonomy. Maulana Abdul Malik, a representative of the Rabita-ul-Madaris (Union of Madrasas), declared:

> *"We will not be made slaves to the government... They are trying to bring in laws that will bind the schools. They are acting against Islam. We will never accept this" (Terzieff, 2002)*

Hafiz Hussain Ahmad, a hardline cleric and senator in the upper house of Pakistan's Parliament, echoed this sentiment, stating bluntly:

> *"His total policy is against Islam" (Butler, 2006)*

Even more moderate voices expressed alarm at the government's approach. Karachi-based Mufti Muneeb-ur-Rehman warned:

> *"We are open-minded about the dialogue, but the government must listen to us and keep us engaged. We cannot allow there to be a dead end to these talks, because that means trouble" (Terzieff, 2002)*

The backlash to enlightened moderation was not confined to domestic religious regulation. It was further intensified by Musharraf's strategic alliance with the United States following the events of 9/11 and Pakistan's subsequent participation in the War on Terror. For many religious leaders, enlightened moderation appeared less a homegrown reform project and more an externally driven attempt to impose Western—and particularly American—ideological norms. Qazi Hussain Ahmad, leader of Jamaat-e-Islami, Pakistan's largest religious political party, declared:

> *"It is an American agenda. Musharraf is merely there to implement and honor their whims and wishes" (Terzieff, 2002)*

This sentiment extended beyond political elites. On the ground, religious seminaries and their networks interpreted the reforms as existential threats to Pakistan's Islamic identity. Abdul Rashid Ghazi, the head of the madrasa attached to Islamabad's Red Mosque and a prominent figure in hardline religious circles, dismissed the agenda outright:

> *"We will not stop teaching jihad (holy war) just because America does not like it" (Pennington, 2005)*

He warned of mass unrest and framed violent resistance as justified:

> *"People in Pakistan will rise up, and you cannot be exactly sure how they will react, but you will have a kind of civil war situation here... Many people are calling for a jihad now, and that would definitely be justified" (Penhaul, 2001)*

Similarly, Sajid Mir, leader of Jamat-e-Ahle-Hadeeth, framed the government's pro-Western tilt in conspiratorial terms:

> *"Military rulers had surrendered before the US ... Military rulers should not become the 'agents of Americans' or the people will overthrow the government" (The Times of India, 2001)*

These responses underscore how Musharraf's domestic and foreign policy orientations, though framed as modernizing and moderate, were widely perceived as attempts to secularize and subordinate Pakistan's religious institutions. Far from building consensus, enlightened moderation exacerbated political polarization and energized both mainstream religious parties and militant networks.

While resistance was widespread, the backlash was especially acute in Pashtun-majority areas. There, decades of institutional support for religious conservatism—particularly under Zia's Islamization—had entrenched clerical authority and fostered an environment ripe for radicalization. Musharraf's reformist and pro-Western agenda was viewed as a direct challenge to these entrenched structures. The rise of the Muttahida Majlis-e-Amal (MMA)—a coalition of Islamist parties—to power in the 2002 general elections in the North-West Frontier Province (now Khyber Pakhtunkhwa) was a clear indicator of this political backlash. The MMA's electoral success signalled not only widespread rejection of Musharraf's policies but also the resurgence of political Islam in a region historically mobilized through religious networks.

3 Data

We construct a novel district-level panel dataset covering the period 1970 to 2021 by digitizing and consolidating multiple sources of administrative, electoral, census, and political violence data. This dataset enables us to examine how state-led nation-building efforts under General Zia, centred on Islam, shaped the local response to secularization reforms implemented later by General Musharraf. In addition, we compile a complementary dataset using multiple rounds of individual-level survey data to track madrasa enrolment among cohorts born before, during, and after Zia's rule. This dataset provides micro-level evidence on a core religious institution at the heart of Zia's Islamization efforts, allowing us to investigate the mechanism through which his reforms shaped religious education and socialization and contributed to the backlash against Musharraf's subsequent secularization.

Pashtun Composition.—A central component of our empirical strategy is the spatial variation in ethnic Pashtun presence across Pakistan. We define Pashtun presence as the share of individuals reporting *Pashto* as their mother tongue in each district, using this measure as a proxy for differential exposure to Zia-era Islamization policies. As mentioned above (see sections 1 and 2.2), Pashtun regions were particularly targeted under Zia's Islamization because their ethnic and kinship ties to the Afghan *mujahideen* made them natural bases for Pakistan's support of the Afghan *jihad*—a core pillar of Zia's foreign policy. This alignment of ideological and strategic objectives led the regime to concentrate religious mobilization and madrasa expansion in the Pashtun-majority districts. Consequently, these regions experienced deeper and more sustained ideological penetration, reflected in the growth of madrasa networks and Islamist political organization. We therefore use Pashtun share not simply as an ethnic marker but as a proxy for historical exposure to Islamization. This approach captures the idea that Zia's ideological project took strongest root in Pashtun areas, which were therefore the most likely to experience backlash against Musharraf's subsequent secularization efforts.

To construct this measure, we digitize data on ethnic composition from the 1961 and 1998 Population Censuses of Pakistan. For our main specification we use Pashtun presence in 1998, which provides the greatest statistical precision due to the higher number of clusters (i.e., districts). Our results remain robust when using the 1961 census as an alternative historical measure of Pashtun share, suggesting that our findings are not driven by recent demographic shifts or selective migration patterns among Pashtuns. As shown in Figure 2, the spatial distribution of Pashtun populations closely matches historical and ethnographic accounts, with concentrations in Khyber Pakhtunkhwa, northwestern Balochistan, and major urban

centres like Karachi, reinforcing the reliability of our classification.

Baloch Composition.—In addition, we control for the district share of individuals reporting *Balochi* as their mother tongue. This proxy captures exposure to the Baloch separatist insurgency, which is organizationally and geographically distinct from Islamist inspired insurgent violence in Pashtun areas and is not a product of Zia-era Islamization. In our regressions, we include interactions of the Baloch share with time period indicators, analogous to the approach used for Pashtun share, ensuring that our estimates of Zia-era Islamization's effects are not confounded by contemporaneous conflict dynamics in Baloch-majority districts.

Political Violence.—To capture political violence, we use event-level data from the Global Terrorism Database (GTD) compiled by the National Consortium for the Study of Terrorism and Responses to Terrorism (START, 2022). The GTD documents incidents involving the use or threat of violence by non-state actors for political, religious, or ideological purposes. Each incident record includes information on the date and location of the event, the weapons used, the nature of the target, the number of casualties, and—when identifiable—the group or individual responsible. We aggregate these data to the district-year level, constructing both the incidence and frequency of political violence from 1970 to 2021. Further details on the construction of these measures are provided in subsection C.3 of Appendix C.

Islamist Votes.—We construct a district-election year panel of Islamist vote shares using official general election results digitized and made publicly accessible by the Free and Fair Election Network (FAFEN). The data cover elections for the Provincial Assembly held in 1970, 1977, 1985, 1988, 1990, 1993, 1997, 2002, 2008, 2013, and 2018. Islamist vote share is defined as the proportion of valid votes cast for parties promoting explicitly Islamist agendas and policies. The classification of political parties as "Islamist" draws on extensive secondary literature, including newspapers, academic studies, and reports on Pakistan's electoral history. The full list of parties identified as Islamist is provided in subsection C.4 of Appendix C.

For the elections between 1988 and 2018, we were able to classify parties directly based on available documentation. However, for earlier elections (1970–1985), information on party affiliation was incomplete or unavailable: the 1970 and 1977 elections suffer from limited data coverage, while the 1985 elections were held on a non-party basis. For these years, we identify Islamist candidates using religious honorifics (e.g., *Mufti*, *Maulana*, *Molvi*, *Qazi*, *Haji*) in candidate names as indicative of religious affiliation and orientation, allowing us to approximate votes cast for Islamist candidates.

Because administrative boundaries vary over time, we match constituencies to consistent district definitions to create a balanced panel spanning multiple election cycles. Details of the boundary harmonization procedure are provided in subsection C.1 of Appendix C.

Religious Schooling.—To examine the educational legacy of Zia-era Islamization, we compile data from multiple sources capturing both the temporal expansion of madrasa enrolment and the contemporary sectarian composition of religious education. Our main contribution is the construction of an individual-level dataset that tracks madrasa enrolment across birth cohorts spanning 1932–2007 and covering all districts of Pakistan. The dataset draws on multiple rounds of the Pakistan Integrated Household Survey (PIHS) conducted in 1991, 2001, 2011, 2013, and 2019, each providing nationally representative cross-sections of households with individual-level information.

Importantly, the PIHS records respondents' year of birth, ethnicity, and district of residence, allowing us to link individuals' madrasa enrolment to both their demographic characteristics and local context. These features enable us to exploit variation along three key dimensions—birth cohort, ethnicity, and location—to test whether Pashtun cohorts residing in Pashtun-majority districts who were of school-going age during General Zia's rule (and thus directly exposed to his Islamization policies) were more likely to enrol in madrasas than cohorts who were either already past school age or too young at the time.

This dataset provides a rare micro-level perspective on how exposure to Zia's Islamization shaped patterns of religious education and socialization across ethnic groups and regions. Full details on the dataset construction and the variable tracking madrasa enrolment by birth cohort are provided in subsection C.5 of Appendix C.

To complement this analysis and assess the ideological orientation of Zia's madrasa expansion, we supplement the individual-level dataset with recent (i.e., 2025) administrative records from the Ministry of Education that report the location and sectarian affiliation of registered madrasas. These data allow us to map the geographic concentration of *Deobandi* institutions, a sect widely recognized for its more conservative and doctrinally rigid orientation, and examine their correspondence with Pashtun-majority areas. Although these records are cross-sectional, we use the contemporary sectarian distribution as a proxy for the enduring institutional imprint of Zia's Islamization. Taken together, the individual-level madrasa dataset and the Ministry's sectarian records shed light on how Zia's state-led Islamization in Pashtun regions helped entrench a religious education infrastructure with a persistent ideological imprint.

Religious Engagement, Female Education and Early-age Marriage.—To assess whether Zia's Islamization produced enduring ideological shifts consistent with the en-

trenchment of conservative social norms and values, we compile a seven-decade-long district-level panel on female literacy and early-age marriage spanning 1951–2023. We digitize data from the Population Censuses of 1951, 1961, 1972, 1998, 2017, and 2023 to construct two key indicators. The first measures female school-age literacy, defined as the share of girls aged 5–9 who are literate in each district, capturing access to secular education during early schooling years. The second measures early-age marriage among women, defined as the proportion of females aged 15–19 who are currently married, widowed, separated, or divorced (for 1951, this measure is calculated for females aged 10–19 due to data constraints).

We complement these indicators with another long district-level panel spanning 1951–1998 on religious engagement, proxied by readership of the holy Quran. These data come from the Population Censuses of 1951, 1961, 1972, and 1998, which report the share of individuals in each district who can read the Quran.

By tracking these indicators over time, we examine whether districts with greater exposure to Zia's Islamization, particularly Pashtun-majority areas, experienced divergent trajectories in religious engagement, female literacy, and early-age marriage relative to other regions. Consistent with our broader argument, these data allow us to test whether the ideological project initiated under Zia translated into persistent social transformations: a decline in secular educational attainment among girls, a reinforcement of early marriage norms, and rising levels of religious engagement. Together with our findings on madrasa enrolment, this evidence provides a district-level view of how state-led Islamization fostered durable changes in values and behaviour, entrenching a more conservative social order that persisted long after Zia's regime.

Contemporary Attitudes Toward Out-Groups.—Finally, we use data from a nationally representative 2016 survey conducted by the Free and Fair Election Network (FAFEN) to measure exclusionary social attitudes. Respondents were asked about their perceptions of various marginalized groups, including migrants, linguistic minorities, and sectarian communities. We compute district-level averages of negative responses toward each group. Details of the specific measures we construct and the underlying response data are provided in subsection C.3 of Appendix C .

Unlike the long-run panel data on female literacy, early-age marriage, and religious engagement, these survey data are cross-sectional. We therefore use them not to study temporal change but to examine whether contemporary out-group attitudes are systematically correlated with historical exposure to Zia's Islamization. This cross-sectional evidence complements our panel-based findings by providing an additional snapshot of the persistent ideological imprint associated with deeper Islamization in Pashtun-majority districts.

4 Empirical Strategy and Main Results

4.1 Empirical Strategy

Baseline Specification.—As noted above (see section 2 on historical background), during the Soviet–Afghan war, Zia-era policies intensified Islamization in Pashtun-majority areas that, owing to their ethnic and kinship ties with Afghan *mujahideen*, became focal points for religious mobilization and militant training against Soviet forces. To examine how areas with greater exposure to Zia's Islamization responded to General Musharraf's 1999 coup and his subsequent agenda of "enlightened moderation," we use a difference-in-differences (DID) framework, where the district-level pre-coup Pashtun share serves as a proxy for historical exposure to Zia-era Islamization. We conceptualize the backlash as manifesting along two primary dimensions: (i) political violence and (ii) electoral behaviour, measured through support for Islamist parties. Accordingly, we estimate the following DID specification:

$$\begin{aligned} Y_{it} = \beta_1 \Big(\text{Pashtun Share}_i \times \text{Post 1999}_t \Big) + \beta_2 \Big(\text{Pashtun Share}_i \times \text{Post 1977–Pre 1999}_t \Big) \\ + \gamma_i + \delta_t + \mathbf{X}'_{it}\boldsymbol{\mu} + \varepsilon_{it}, \end{aligned} \tag{1}$$

where Y_{it} denotes the outcome for district i in year t (political violence or Islamist votes), Pashtun Share_i is the pre-Musharraf Pashtun share in district i (measured in the census year 1998), $\text{Post 1999}_t = 1$ for $t \geq 1999$ is the post-Musharraf coup dummy, and $\text{Post 1977–Pre 1999}_t = 1$ for $1977 \leq t \leq 1998$ captures the period from the post-Zia coup to pre-Musharraf coup. The baseline period is $t \leq 1976$, corresponding to the pre-Zia years. District and year fixed effects (γ_i and δ_t) absorb time-invariant district heterogeneity and common shocks, respectively. The vector $\mathbf{X}_{it}$ includes time-varying controls as well as a set of initial (1972) district characteristics incorporated flexibly through their interaction with the full set of year fixed effects. ε_{it} is the error term, with standard errors clustered at the district level.

The coefficient β_1 captures the change in the outcome Y_{it} between high- and low-Pashtun-share districts in the post-1999 period relative to the pre-1977 baseline, conditional on the intervening-period dynamics captured by β_2. This coefficient is the parameter of interest, as it captures the effect of the Musharraf-era policy reversal of Zia's earlier Islamization relative to the pre-Zia period, net of any differential patterns observed during the period 1977—1998.

Event Study Specification.—To examine the dynamics of our outcomes over time and test for pre-existing differential trends across districts, we estimate an event-study specification that interacts our measure of exposure to Zia-era Islamization (the pre-Musharraf

Pashtun share) with relative-time dummies. This approach allows us to trace whether high- and low-Pashtun-share districts followed parallel trends prior to Zia's Islamization and how their trajectories diverged thereafter, particularly in response to Musharraf's later attempt to reverse these policies. Specifically, we estimate:

$$Y_{it} = \sum_{k \neq -1} \beta_k \Big(\text{Pashtun Share}_i \times D_{k,t} \Big) + \gamma_i + \delta_t + \mathbf{X}'_{it}\boldsymbol{\mu} + \varepsilon_{it}, \tag{2}$$

where Y_{it} is the outcome for district i in year t (political violence or Islamist votes), Pashtun Share$_i$ is the pre Musharraf Pashtun share in district i (measured in 1998 and time invariant), and $D_{k,t}$ is an event time indicator equal to one if $t - 1977 = k$ and zero otherwise. We omit $k = -1$ so that the last available pre-Zia coup period in the panel serves as the reference category. For political violence, this corresponds to 1976, the year immediately preceding Zia's coup; for Islamist vote shares, it corresponds to the 1977 general election, the last electoral benchmark before Islamization.

The coefficient β_k measure how the relationship between Pashtun share and the outcome Y_{it} evolves over event time relative to the final pre-Islamization period. For $k < 0$, the coefficients capture pre-trends and test whether high- and low-Pashtun-share districts were on similar trajectories prior to Zia's Islamization. For $k > 0$, they trace the post-Zia dynamics, including the response to Musharraf's subsequent policy reversal. All other notation follows the baseline specification.

Identification.—Our empirical approach relies on a difference-in-differences framework, under the assumption that, in the absence of the General Zia's coup induced Islamization, districts with different Pashtun shares would have exhibited similar trends in outcomes. While this assumption is not directly testable, we assess its plausibility and explore robustness using two complementary methods. First, and most importantly, we use the event study specification described in Equation 2 to rule out pre-trends prior to Zia's coup for both our outcomes—political violence and Islamist votes. The absence of systematic differences in pre-trends between high- and low-Pashtun-share districts is reassuring in terms of the validity of the identifying assumption. However, even if pre-trends appear flat, our design still requires that counterfactual trends would have evolved in parallel across districts with differing Pashtun shares before and after the coup. We, therefore, implement the "honest" difference-in-differences framework proposed by Rambachan and Roth (2023), which formally quantifies and bounds potential violations of parallel trends by estimating the slope of pre-trends and adjusting post-treatment estimates under both linear and bounded non-linear deviations. Additionally, we apply the synthetic difference-in-differences (SDID) estimator of

Arkhangelsky et al. (2021), which reweights control districts to match the pre-coup outcome trajectory of high-Pashtun districts more closely. This approach mitigates concerns about baseline trend imbalances by improving pre-treatment fit between treated and comparison units. While these approaches do not eliminate reliance on the parallel trends assumption entirely, they help assess the sensitivity of our results to potential violations.

As an additional diagnostic, we plot raw outcome trends for districts above and below the median pre-Musharraf Pashtun share. Appendix A Figure A2 shows that although high-Pashtun districts have higher baseline levels of political violence, their trends are broadly similar to those of low-Pashtun districts in both the pre-Zia and pre-Musharraf periods, with a marked divergence emerging only after the 1999 Musharraf coup and subsequent secularization reforms. Appendix A Figure A3 presents the corresponding patterns for Islamist vote shares. Prior to either coup, electoral support for Islamist parties evolves in parallel across high- and low-Pashtun districts, while a pronounced increase in Islamist vote share in high-Pashtun districts appears only after Musharraf's reforms. These patterns are consistent with the identifying assumption of parallel trends and reinforce our interpretation that the observed changes in outcomes are driven by post-Musharraf dynamics rather than by pre-existing differential trajectories.

A further identification concern is that differential trends in underlying district characteristics—rather than exposure to Zia-era Islamization—could be driving our results. In particular, if baseline (1972) district characteristics that covary with Pashtun share exhibited differential trends prior to the Zia coup, they might mechanically generate the post-1999 divergence we attribute to Musharraf's policy reversal. To address this possibility, we flexibly control for a comprehensive set of initial district characteristics that proxy for state capacity, public service delivery, productive economic potential, and connectivity. By interacting each of these baseline variables with the full set of year fixed effects, we allow their influence to vary arbitrarily over time, thereby netting out any differential time trends originating from these initial conditions. Specifically, we include per-capita stocks of education and health facilities (universities, colleges, high, middle, and primary schools; hospitals and dispensaries) to capture public service provision; wheat productivity to account for economic potential, income variation, and rural shocks that may affect the opportunity cost of mobilization or the appeal of Islamist parties; and road density to capture differences in connectivity and state reach. This flexible adjustment ensures that our estimated effects are not confounded by long-run district characteristics that both correlate with Pashtun share and evolve differentially over time.

4.2 Main Results

Static DiD results.—We begin by estimating the static difference-in-differences specification in Equation 1, which examines how districts with differing historical exposure to Zia-era Islamization, proxied by their pre-Musharraf Pashtun share, responded to the post-1999 policy reversal initiated by General Musharraf. The estimates are reported in Table 1. Panel A presents effects on political violence, and Panel B reports effects on Islamist vote share. All specifications include district and year fixed effects and fully control for violence associated with the Baluchistan insurgency.[1] In Column 2, we additionally include literacy and urbanization to capture changes in development and settlement patterns that may co-move with our outcomes. Finally, Columns 3–4 flexibly control for initial (1972) district characteristics that proxy for state capacity, public service delivery, productive economic potential, and connectivity. Column 4, which incorporates both fixed effects and the full set of controls, is our preferred specification.

Across all specifications, districts with higher pre-Musharraf Pashtun shares exhibit a sizable post-1999 rise in political violence, with no differential trend during the intervening period between the two coups (1977–1998). In Panel A, and focusing on our preferred model in Column 4, a 10-percentage-point higher pre-Musharraf Pashtun share is associated with roughly 24% more political violence after the 1999 coup. Given a mean of ln(political violence) of -3.11, this implies an increase in the geometric mean from about 0.045 to 0.056 incidents per district-year. Importantly, the coefficient on the Pashtun Share$_i \times$ Post 1977–Pre 1999$_t$ interaction remains near zero and statistically insignificant across all columns.

Turning to electoral outcomes, Panel B shows that high-Pashtun districts experience a marked post-1999 increase in Islamist vote shares. In our preferred specification (Column 4), a 10-percentage-point higher pre-Musharraf Pashtun share is associated with about 1.5 percentage points higher Islamist vote share after 1999. At the sample mean Pashtun share of 0.208, the implied change is $0.15 \times 0.208 \approx 0.031$, or about a 3.1-percentage-point increase, raising the mean Islamist vote share from 7.7 percent to roughly 10.8 percent. As with political violence, the Pashtun Share$_i \times$ Post 1977–Pre 1999$_t$ interaction term remains close to zero and statistically insignificant, strongly suggesting that districts with higher Pashtun shares did not exhibit differential trends in violence or Islamist voting during the Zia-to-Musharraf intervening period. Collectively, the results indicate that both violent and

[1] The post-1999 period partially overlaps with the Baloch separatist insurgency, which is organizationally and geographically distinct from the Islamist linked political violence in Pashtun areas. To address potential confounding, we always include analogous interactions with the pre-Musharraf Baloch share. The results are similar with or without these interactions.

electoral reactions emerge only after General Musharraf's 1999 coup, with no analogous response following General Zia's 1977 coup. Put differently, the opposition that materializes after 1999 reflects an activated historical legacy—Zia-era Islamization becomes consequential only once Musharraf attempts to reverse it.

Parallel trends.—A key concern is that high-Pashtun districts may have been on a different trajectory (relative to their low-Pashtun counterparts) even before Zia's coup induced Islamization programme. To assess this and to trace dynamics, we estimate Equation 2 with a flexible event-time structure around the 1977 Zia coup. Panel A of Figure 3 plots the event-time coefficients for political violence; Panel B reports the corresponding estimates for Islamist vote share. For both outcomes, the pre-Zia coefficients are clustered near zero and are statistically insignificant. The coefficients corresponding to the intervening period between the two coups from 1978 to 1998 also shows no noticeable increase in backlash. The event-time coefficients rise only after the Musharraf coup and remain elevated, indicating a clear break from the pre-1999 path. This timing coincides with Musharraf's "enlightened moderation" reforms and is consistent with parallel trends: backlash emerges after 1999, not before, in both political violence and Islamist voting.

While the pre-trend checks are reassuring, our design still requires that counterfactual trends would have moved in parallel for high- versus low-Pashtun areas before and after the Zia coup. To assess sensitivity to possible departures from this assumption, we employ the bounded-violations "honest" event-study framework of Rambachan and Roth (2023). Their approach imposes two restrictions. First, a smoothness bound on second differences limits how quickly differential trends can bend from one period to the next, reflecting the notion that long-run background trends evolve gradually rather than through discrete jumps. Second, a relative-magnitude bound constrains post-treatment deviations to be at most M times the largest pre-treatment deviation. Under these restrictions, post-1999 effects are partially identified; we report honest confidence sets and sensitivity curves as M varies, including the minimum M that would reduce the estimated effect to zero. This procedure makes the identifying assumptions explicit by stating the bounds and showing results across their range. Figure A4 and Figure A5 present these results for political violence and Islamist vote share, respectively. Across a reasonable range of deviations, the estimated post-1999 effects remain statistically significant and substantively large. Although this approach cannot eliminate all concerns about identification, it demonstrates that our findings are not driven by modest violations of the parallel trends assumption.

As a complementary strategy for addressing concerns arising from the parallel trends assumption, we also implement the synthetic difference-in-differences (SDID) estimator of Arkhangelsky et al. (2021). SDID improves pre-treatment balance by reweighting control

districts so that their pre-coup outcome trajectories more closely match those of high-Pashtun districts, thereby reducing reliance on parametric trend assumptions. Panel A of Table A2 reports the SDID coefficient estimates for both outcomes using the synthetic analogue of our baseline specification in Equation 1. The results align closely with our baseline estimates: we continue to find a positive and statistically significant effect of Musharraf's post-1999 secularization reforms on both political violence and Islamist vote share.

Panels A–B of Figure A6 provide a visual representation of the SDID results. Each panel plots the outcome trend for the treated group (solid line) alongside the synthetic control trend (dashed line), with treatment-period effects estimated via the cluster bootstrap method described in Algorithm 2 of Arkhangelsky et al. (2021). The figures also report the time-specific weights used to construct the synthetic control, shown in grey. Together, these patterns demonstrate that the synthetic control closely tracks the pre-1999 trajectory of high-Pashtun districts and diverges only after Musharraf's reforms, reinforcing that our findings are not artifacts of differential pre-treatment trends or inadequate pre-coup fit.

In addition to the static SDID estimates, we further implement the event-study version of the synthetic difference-in-differences estimator, following the approach proposed by Ciccia et al. (2024). Figure A7 presents these dynamic SDID estimates for both outcomes—political violence in Panel A and Islamist vote share in Panel B. By interacting the synthetic weights with event-time indicators, this specification extends the logic of SDID to a fully dynamic setting, enabling a comparison of the treated districts' event-time coefficients to those of their synthetic counterparts. Consistent with the static SDID results, the pre-coup coefficients remain close to zero and statistically indistinguishable from each other, indicating that the synthetic control closely reproduces the pre-1977 and pre-1999 trajectories of high-Pashtun districts. Standard errors are computed using the cluster bootstrap procedure of Arkhangelsky et al. (2021), and the 90% confidence intervals further reinforce the absence of differential pre-trends. Following the 1999 coup, however, the synthetic event-study coefficients diverge sharply: political violence and Islamist vote shares rise markedly in high-Pashtun districts relative to their synthetic controls. This divergence mirrors the pattern observed in our baseline and "honest" event-study estimates and provides additional evidence that the post-1999 backlash is not an artifact of poor pre-treatment fit or unaccounted trend heterogeneity. Together with the static SDID results, Figure A7 strengthens the case that Musharraf's secularization reforms activated historical exposure to Zia-era Islamization, generating distinct violent and electoral responses only after 1999.

5 Mechanisms

Rise of Madrasas.—A large body of literature argues that Zia-ul-Haq's Islamization shifted national education policy toward ideologically conservative curricula and facilitated a rapid expansion of madrasas, particularly in Pashtun-majority districts (Haqqani, 2005; Fair, 2008; Riaz, 2008; Jalal, 2014). These institutions emphasized stricter and more austere interpretations of Islam and, according to contemporaneous accounts, played a central role in disseminating Islamist ideology among youth during the anti-Soviet jihad that followed the 1979 invasion of Afghanistan. If Zia-era Islamization shaped later political and social outcomes partly by altering religious education exposure, we should observe detectable changes in madrasa attendance among Pashtuns who were of schooling age during his rule.

To examine this mechanism, we estimate the following triple-difference specification:

$$\begin{aligned} Y_{iedc} = \beta\,(&\text{Pashtun Ethnicity}_e \times \text{Pashtun Majority District}_d \times \text{Zia Exposure at Madrasa Age}_c) \\ &+ \theta_{ce} + \delta_{cd} + \lambda_{ed} + \mu_c + \eta_d + \zeta_e + \mathbf{X}_i'\boldsymbol{\gamma} + \varepsilon_{iedc}, \end{aligned} \tag{3}$$

where Y_{iedc} is an indicator equal to one if individual i of ethnicity e, residing in district d and born in cohort c, has ever attended a madrasa. $\text{Pashtun Ethnicity}_e$ is an indicator for Pashto-speaking respondents. $\text{Pashtun Majority District}_d$ equals one if district d has a clear majority of Pashto speaking population. $\text{Zia Exposure at Madrasa Age}_c$ equals one if the respondent's birth year implies that at least one year of the typical madrasa age range (ages 5 to 16) coincided with Zia's rule (1977–1988). The terms θ_{ce}, δ_{dc}, and λ_{de} denote cohort-by-ethnicity, cohort-by-district, and ethnicity-by-district fixed effects. The terms μ_c, ζ_e, and η_d denote cohort, ethnicity, and district fixed effects. Together, these terms account for ethnicity-specific differences within cohorts, cohort- and ethnicity-specific differences within districts, cohort-varying factors, and time-invariant characteristics at the ethnic and district levels. $\mathbf{X}_i$ is a vector of individual-level controls, including age, gender, and the urbanization level of the respondent's place of residence. ε_{iedc} is the error term. Standard errors are clustered at the district level.

The coefficient β isolates the triple-difference contrast between Pashtuns and non-Pashtuns, across Pashtun-majority and non-majority districts, before and after cohort exposure to Zia's rule. As reported in Table 2, β is statistically significant at the one percent level and implies a 2.5 percentage point higher likelihood of ever attending a madrasa among Pashtun individuals in Pashtun-majority districts whose schooling years overlapped with Zia's rule, relative to comparable individuals without overlap. The magnitude aligns with historical accounts documenting substantial increases in madrasa enrolment among Pashtun communities during

this period (Riaz, 2008).

The cohort dynamics reinforce this interpretation. A cohort-based event-study aligned with the triple-difference structure (Figure 4) shows that madrasa attendance rises monotonically with the share of each cohort's madrasa-age years coinciding with Zia's rule. These effects persist after Zia's regime, consistent with prior research documenting lasting shifts in religious education patterns (Fair, 2008). Cohorts too young or not yet born during Zia's years show no comparable changes. The absence of pre-trends and the persistence of post-exposure effects support an exposure-driven interpretation rather than one driven by uniform secular trends across cohorts.

Taken together, these results indicate that exposure to Zia-era Islamization during formative schooling years is associated with sustained increases in madrasa attendance, an institution frequently described in academic and policy accounts as an important site for ideological recruitment and subsequent extremist mobilization (ICG, 2002; Afzal, 2018). This provides a plausible mechanism linking Zia-era Islamization to the long-run rise in political violence and support for Islamist parties in the Pashtun heartlands.

Islamist Ideological Shift.—Zia-era institutional investments reallocated resources toward religious schooling, potentially reinforcing Islamist-leaning social norms. To study these dynamics, we construct a long-run district-level panel using Pakistan's population censuses, capturing three key outcomes: female literacy among school-age children, early-age marriage among women, and the share of individuals able to read the holy Quran. The first two are gendered outcomes closely tied to social norms, while the third is a non-gendered measure that proxies for broader religious engagement across the population.

Our analysis shows that districts with greater exposure to Zia-era Islamization experienced sharper declines in female school-age literacy and higher rates of early-age marriage, indicating the entrenchment of Islamist-oriented gender norms. These patterns are evident in both the static Difference-in-Differences estimates reported in Table 3 and the dynamic effects shown in Figure 5. They are consistent with documented resistance to girls' education in Pashtun-majority areas, including the high-profile case of Malala Yousafzai in Swat, who was attacked by the Taliban for opposing restrictions on female schooling. At the same time, these districts also experienced a post-Zia increase in the share of individuals able to read the holy Quran, reflecting a broader rise in religious engagement affecting both men and women, as shown in Table A3.

Importantly, none of these outcomes display systematic pre-Zia trends, indicating that the observed changes are unlikely to reflect pre-existing differences. The increases in religious engagement and the shifts in gendered social outcomes persist long after Zia's tenure, consistent with the view that exposure to Islamization during this period produced endur-

ing ideological and social transformations. Panels C–D of Figure A6 and Figure A8 further show that these patterns are robust to the Synthetic Difference-in-Differences estimator of Arkhangelsky et al. (2021), which reweights units to improve pre-treatment balance, reinforcing that the observed effects reflect the lasting impact of Zia-era policies.

Alternative Mechanisms.—We next examine whether the backlash we document could plausibly be generated by channels other than the ideological and educational shifts associated with Zia's Islamization. A first candidate mechanism is that the post-Musharraf effects are driven by a general tendency toward ethnic mobilization in Pashtun-majority areas after *any* military coup, regardless of its ideological orientation. Our baseline specification is designed to capture this: it uses the two coups in our sample period and estimates a single model that interacts each coup indicator with the Pashtun population share, relative to the pre-Zia baseline. Our baseline results and event-studies indicate that Pashtun-majority districts do not exhibit a comparable increase in political violence or Islamist voting following the 1977 coup, which is consistent with the view that the reaction after 1999 is tied to the attempted rollback of an institutionalized religious order rather than to military intervention per se.

A second possible alternative mechanism is that the rise in violence and Islamist support simply mirrors shifts in military operations that disproportionately targeted Pashtun areas after 1999. To evaluate this, we assemble event-level data on military operations, including the number of operations, and corresponding fatalities, injuries, and arrests, and estimate Equation 1 with these outcomes as dependent variables. Table A4 shows that none of these measures increases systematically in Pashtun-majority districts around 1999; if anything, point estimates are negative, suggesting that Pashtun areas did not experience a disproportionate escalation in counterinsurgency activity that could mechanically generate the patterns in violence and Islamist support that we document.

Third, we assess whether the observed backlash could instead be driven by differential changes in human capital or urban structure. If literacy and schooling rose faster in Pashtun-majority districts, the costs of participation could fall, and the pool of potential activists could shift; similarly, more rapid urbanization could deepen organizational density and increase exposure to mobilizing narratives from multiple sources. To probe these channels, we use time-varying district-level literacy rates and urbanization shares as dependent variables. Columns 1 and 2 of Table A5 report the results. The estimated coefficients on the Pashtun-by-post-1999 interactions do not increase after either the Musharraf or Zia coups; if anything, they are slightly negative. These patterns are more consistent with an ideological channel linked to madrasa expansion and religious socialization than with alternative explanations based on human capital or urban change.

A final set of alternative mechanisms concerns changes in electoral mobilization. Registration and turnout capture different margins of this process: the share of registered voters in the population reflects the size of the eligible electorate brought into the formal system, while turnout measures the intensity with which this electorate participates in elections. If Pashtun-majority districts experienced a disproportionate post-1999 increase in registration, the rise in Islamist vote shares and violence could simply reflect a broader expansion of political participation rather than a shift in ideological preferences. Likewise, if turnout rose more in these districts, changes in Islamist support might be driven by differential voter activation rather than by shifts in views. To assess these channels, we re-estimate Equation 1 using district-level registered voters and turnout as outcomes. Columns 3 and 4 of Table A5 show no systematic post-1999 increase in either measure in Pashtun-majority districts, if anything, the post-Musharraf interaction is negative for turnout, suggesting that neither differential electoral mobilization nor changes in participation intensity can account for the backlash patterns we document. These alternative mechanisms find little empirical support. We do not see systematic evidence that ethnic mobilization around military coups, changes in counterinsurgency activity, shifts in human capital or urbanization, or differential patterns of electoral mobilization can account for the backlash we document. Across all of these exercises, we find little evidence that ethnic mobilization around military coups, changes in counterinsurgency activity, shifts in human capital or urbanization, or electoral mobilization dynamics drive our results. Our evidence is most consistent with a backlash to the disruption of a long-standing ideological order rooted in Zia-era Islamization, in line with historical narratives (Jalal, 2014).

6 Robustness Checks

Zeros in Outcomes.—A challenge in our setting is that one of our outcome variables (political violence) contains zeros, making standard log transformations problematic. We therefore follow the guidance in Chen and Roth (2024), who show that log-like transformations (e.g., log(1 + y)) can obscure the distinction between extensive and intensive margin effects and generate treatment estimates that are sensitive to the outcome's unit scale. To address this concern, we implement several complementary strategies.

First, we re-estimate our main specification (represented by Equation 1) for political violence using a range of alternative options that explicitly calibrate the relative weight assigned to the intensive versus the extensive margin. As reported in Table A6, Panel A, our results remain robust across these calibrations, with consistent treatment effects regardless of how zero and non-zero outcomes are weighted. This indicates that our findings are not driven by

particular choices about how to treat zeros. Second, we consider alternative definitions of the dependent variable, including collapsing outcomes to binary indicators or using untransformed continuous counts. Panel B of Table A6 shows that these alternative constructions yield qualitatively similar results. Finally, to avoid log transformations entirely, we estimate a Poisson pseudo–maximum likelihood (PPML) model, which specifies a multiplicative mean function without requiring the dependent variable to be logged. PPML naturally accommodates zeros, is robust to general forms of heteroskedasticity, and provides consistent estimates of the conditional mean even when the true data-generating process is not Poisson. Re-estimating Equation 1 using PPML (Table A7) yields treatment effects that are similar in sign, magnitude, and statistical significance to those from our baseline log-linear specification. This further reassures that our results are not driven by the exclusion of zero observations or by biases that arise when log-linear OLS is applied under heteroskedasticity.

Taken together, these exercises show that our conclusions are robust to alternative ways of addressing zero outcomes and to the functional-form choices typically implicated in such settings.

Time-Varying Persistence.—Another concern relates to the possibility that the relationship between Pashtun share and our outcomes may reflect time-varying persistence rather than exposure to Zia-era Islamization per se. Historical persistence studies often confront the challenge that the influence of an underlying characteristic can change over time (Fouka, 2020b; Cantoni and Yuchtman, 2021). In our context, this would imply that the effect of Pashtun presence evolves independently of Zia-era Islamization or Musharraf's subsequent reversal. To assess this possibility, we reconstruct the Pashtun-share measure using the 1961 census, the earliest pre-Musharraf population count with reliable district-level ethnic composition, and re-estimate our main specification with this historical measure of treatment. Table A8 reports the results. Using the 1961 Pashtun share yields treatment effects that remain sizable, precisely estimated, and fully consistent with our baseline specification based on the 1998 census. We also replicate the event-study analysis underlying Figure 3 with the 1961 measure; the resulting series, shown in Figure A9, again display flat pre-trends and a sharp post-1999 divergence. These findings indicate that our results are not driven by time-varying persistence in the underlying ethnic composition, and that the identifying variation remains stable across substantially different historical baselines.

Historical Baseline Characteristics as Controls.—We also test whether the results depend on the baseline (1972) district characteristics that enter Equation 1 flexibly through interactions with the full set of year fixed effects. To do so, we replace these 1972 characteristics with their counterparts from the 1961 census and re-estimate the full set of

models. Table A9 presents these estimates. The results remain stable across outcomes and specifications, indicating that the main findings are not sensitive to the choice of baseline year for pre-determined district attributes.

Standard Errors.—We assess the robustness of our results to alternative inference procedures in three steps. First, we account for the possibility of spatial correlation in treatment exposure by implementing Conley standard errors (Conley, 2008), which allow for correlation in the error terms based on geographic proximity. As shown in Table A10, the estimates remain statistically stable for both political violence and Islamist vote share. Second, given that our empirical strategy relies on variation across a moderate number of clusters (districts), i.e., 110, we apply the Wild Cluster Bootstrap method following Cameron et al. (2008). Although our cluster count exceeds the threshold typically associated with reliable asymptotic inference, we use this approach to validate significance levels beyond traditional standard errors. The bootstrapped coefficient distributions, reported in Figure A10 of Appendix A, confirm that the main effects remain significant at conventional levels. Third, we assess the sensitivity of our results to the level at which standard errors are clustered. Our baseline analysis clusters at the district level, where the treatment varies. We also re-estimate the specifications by clustering at the region and province levels, as shown in Table A11. The estimated effects remain consistent across these clustering levels.

Randomized Inference.—To assess whether the estimated treatment effects could plausibly arise by chance, we conduct placebo tests by randomly reassigning the exposure variable. Specifically, we permute Pashtun shares across districts and re-estimate the main specification represented by Equation 1 under each random assignment for both the political violence and the Islamist vote share outcomes. The resulting distributions of placebo coefficients are shown in Panels A and B of Figure A11 in Appendix A. In both cases, the true treatment effect lies in the extreme tail of the placebo distribution, suggesting that the results are unlikely to be driven by chance assignment of treatment.

Excluding Years and Regions.—To evaluate whether our findings are driven by specific years or regions, we conduct a series of leave-one-out exercises. First, we re-estimate the main specification (Equation 1) while sequentially excluding each region from the sample. We then repeat the exercise by sequentially dropping years in small bundles. The resulting estimates, reported in Figure A12 and Figure A13, show no evidence that our results are disproportionately influenced by any single region or year.

Continuous Treatment.—While our treatment varies continuously in intensity, it is introduced uniformly across regions at a single point in time: from 1977 onward, all

units receive some treatment based on their pre-Musharraf coup Pashtun share. This setup follows the two-period continuous treatment framework of Callaway et al. (2024), where no units are treated in the first period and all are subsequently exposed at different doses. Identification is possible by using the lowest-intensity regions as a natural comparison group. To implement this approach, we divide regions into four groups according to the distribution of pre-Musharraf coup Pashtun share and estimate separate coefficients for each quantile, taking the lowest group as the baseline. As shown in Figure A14, the estimates exhibit a monotonic gradient: regions with higher pre-coup Pashtun shares experience larger increases in both Political Violence and Islamist vote share. These results reinforce our baseline findings and provide additional support for robustness under an alternative identification strategy that does not rely on untreated units.

Multiple Hypothesis Testing.—Since we evaluate multiple outcomes, including violence, vote share, female education, female early marriage, and religious engagement we account for the possibility of false positives that arise when testing several hypotheses simultaneously. We report Benjamini–Hochberg adjusted q-values in Table A12, which control the false discovery rate by limiting the expected proportion of false positives among all significant findings. We also implement the Romano–Wolf stepdown procedure, which controls the family-wise error rate by adjusting p-values through resampling so that the probability of making any false rejection across the entire set of tests is bounded. In both approaches, our main estimates remain statistically significant, reinforcing confidence in the robustness of the results. We do not include madrasa enrolment in these multiple-testing adjustments because it is measured at the individual-year level rather than at the district-year level, and therefore is not part of the same outcome family as the district-aggregated variables used in the correction procedures.

7 Conclusion

When states fuse religious ideology with governance, they may generate long-lasting constraints that shape the trajectory of future reform. This paper studies such dynamics by comparing two military regimes in Pakistan that pursued opposing visions of nation-building: General Zia-ul-Haq's Islamization in the late 1970s and General Pervez Musharraf's secularizing "enlightened moderation" in the early 2000s. Leveraging a district-level panel spanning half a century and a difference-in-differences strategy, we show that Musharraf's reforms triggered sharp increases in political violence and Islamist electoral support—but only in districts previously targeted by Zia's Islamization, particularly Pashtun-majority regions. These ar-

eas also experienced long-run declines in female literacy, higher rates of female early-age marriage, rising enrollment in religious seminaries (madrasas), and increased Quran readership, suggesting that Zia's policies entrenched ideological commitments and social norms that later rendered secular reforms politically and socially untenable.

Our findings contribute to multiple literatures. First, we bridge research on nation-building and backlash by demonstrating how state-led ideological projects, once institutionalized, create path dependencies that resist reversal. Unlike studies emphasizing immediate conflict, we show that backlash emerges only when reforms challenge entrenched ideological commitments and associated social norms, as seen in the delayed resistance to Musharraf's secularization. Second, we advance the "deep roots" literature by tracing how Zia's Islamization, especially through education, religious institutions, and the legal system, shaped durable ideological constraints, evident in madrasa expansion, heightened religious engagement, and persistent gendered disparities in education and marriage outcomes. Third, we highlight the political economy of reform in weak states: Musharraf's secularization failed not because of its content per se, but because it clashed with prior state-sponsored religious mobilization.

The relationship between ideological entrenchment and reform resistance suggests that the success of modernization efforts may depend on their alignment with historical patterns of state-building. Where religious norms have been deliberately institutionalized—embedded in law, education, and national identity over decades—attempts to rapidly transform them appear particularly vulnerable to backlash. The persistence of Zia's legacy illustrates how ideological state-building, even under authoritarian regimes, can redefine social behavior, gender relations, and political preferences in lasting ways. These results underscore the long reach of ideological state-building. Once ideas become institutionalized in law, education, and political discourse, they may shape preferences, identities, and political behavior long after the regime that introduced them has exited the stage. For policymakers seeking reform in such contexts, the challenge lies not only in designing new policies but in understanding the histories they confront.

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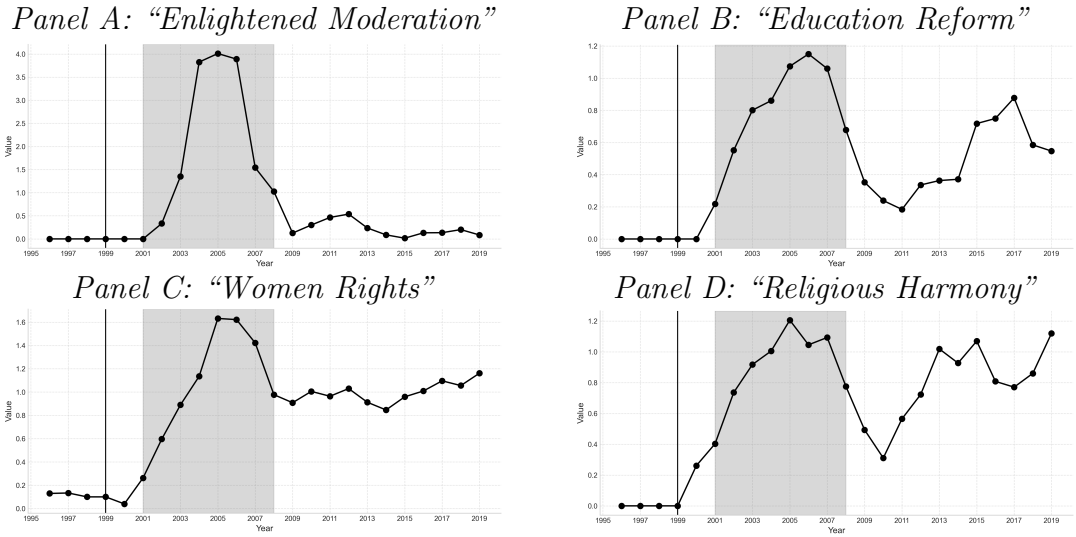
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Figures and Tables

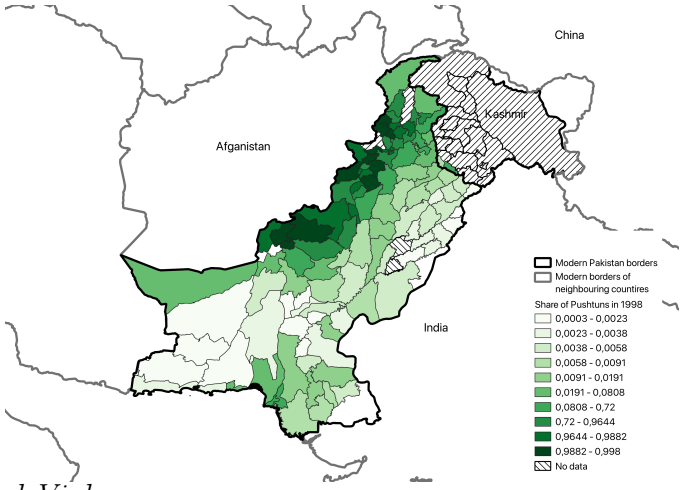
Figure 1: Media Discourse on Musharraf's Secularization



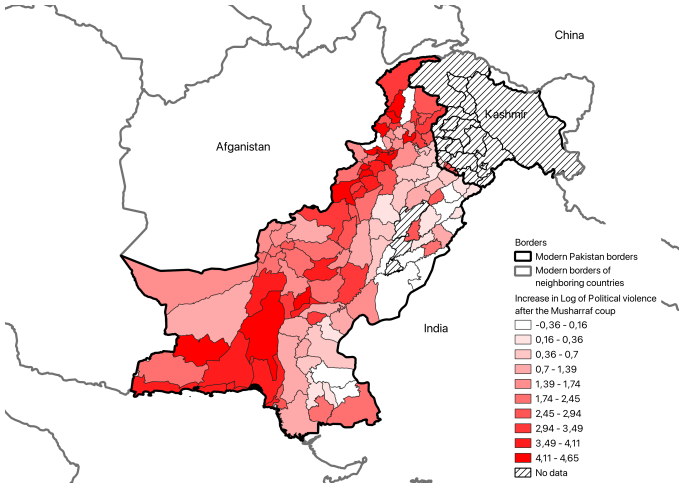
Note: The figure illustrates changes in trends of the word usage drawn from Pakistan's leading newspaper, Dawn, between 1995 and 2020. In Panel A, the graph shows the relative frequency of occurrences of the term "enlightened moderation" compared to its usage in 2003; Panel B shows the same measure for "Education Reform"; Panel C illustrates the same measure for the phrase "Women Rights"; and Panel D for "Religious Harmony". The frequency of a word or group of words is calculated as the number of this term's occurrences divided by the total number of words across all publicly available issues of the newspaper in a given year. Such normalization is necessary to eliminate the effects of large year-to-year variations in the number of articles available and the considerable differences in article lengths. The values are smoothed using a 3-year centered moving average. In all Panels, the gray shaded area highlights the period when General Musharraf served as President of Pakistan (2001–2008), and the black line marks the year of Musharraf's military coup (1999).

Figure 2: Share Pashtuns and Political Violence

Panel A: Share of Pashtuns



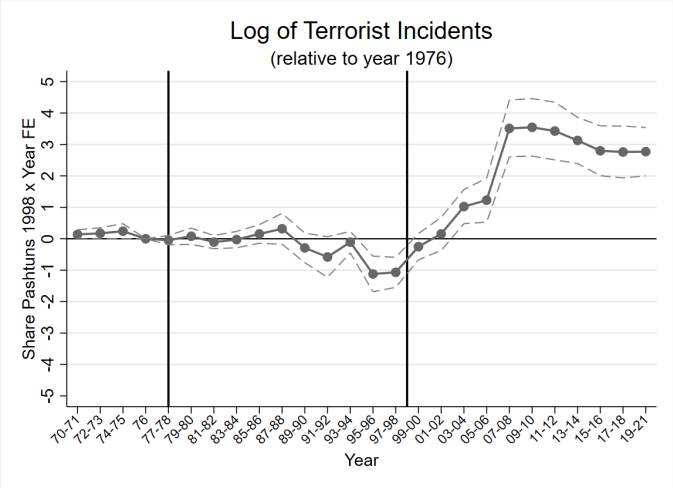
Panel B: Political Violence



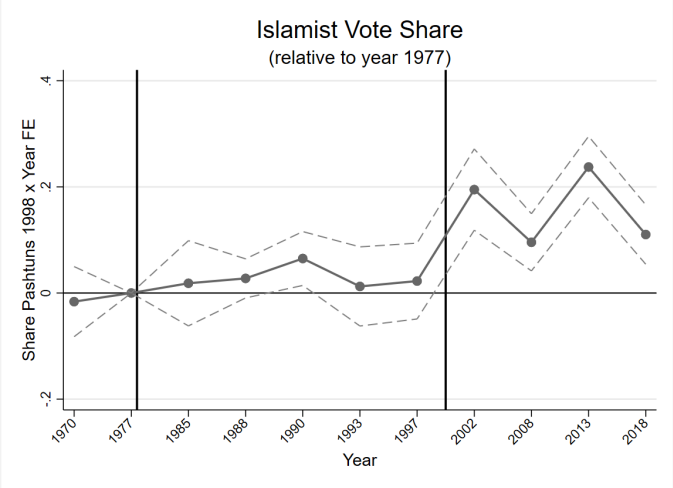
Notes: The maps show the share of Pashtuns in 1998, defined as the proportion of individuals in each district who reported "Pushtu" as their mother tongue in the 1998 Pakistan census (Panel A) and the increase in the logarithm of political violence incidents across present-day Pakistan following General Musharraf's 1999 coup, using data from the Global Terrorism Database (GTD, 2021) (Panel B).

Figure 3: Share Pashtuns, Political Violence and Islamist Vote Share Over Time

Panel A : Political Violence

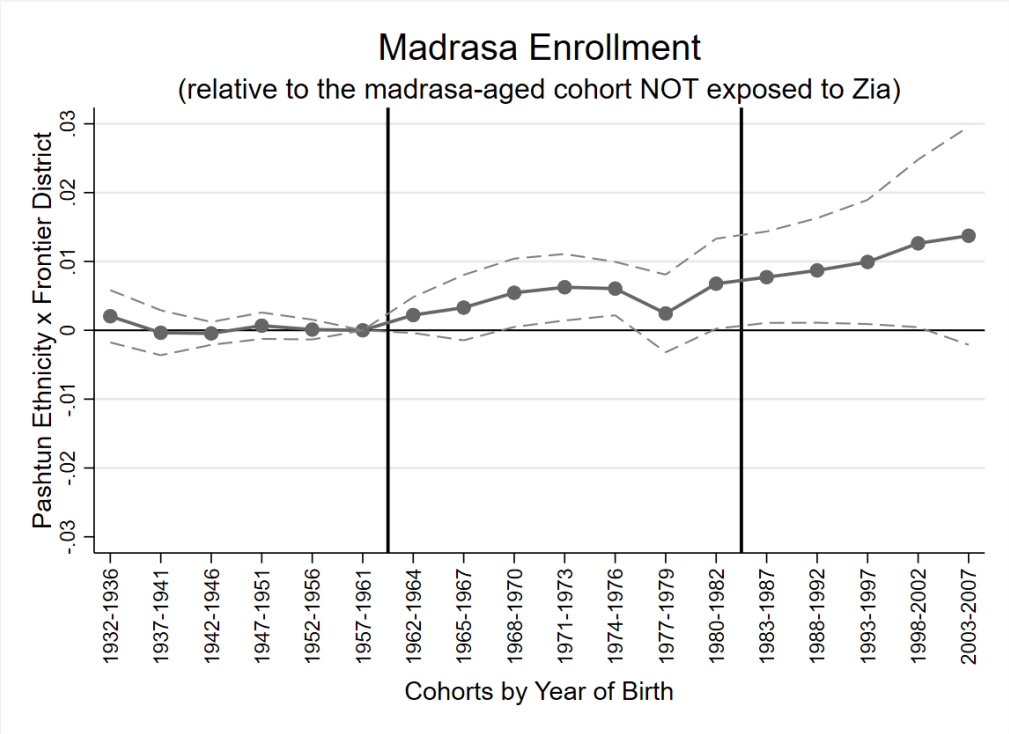


Panel B : Islamist Votes



Notes: The figure reports event-study estimates of the effects of General Zia's 1977 and General Musharraf's 1999 military coups. Panel A uses the log of district-level political violence incidents (GTD, 2021) with 1976 as the baseline year; Panel B uses the district-level share of votes for Islamist parties with 1977 as the baseline. For years with missing party labels (1970, 1977, 1985), candidates' honorifics were used to infer ideological alignment. The main regressor is the district-level Pashtun share (1998 census) interacted with year indicators. All specifications include district and year fixed effects, controls for district-level characteristics (Balochi share interacted with coup indicators, literacy, and urbanization), and standard errors clustered at the district level. Vertical lines in the figures indicate the timing of the 1977 and 1999 coups.

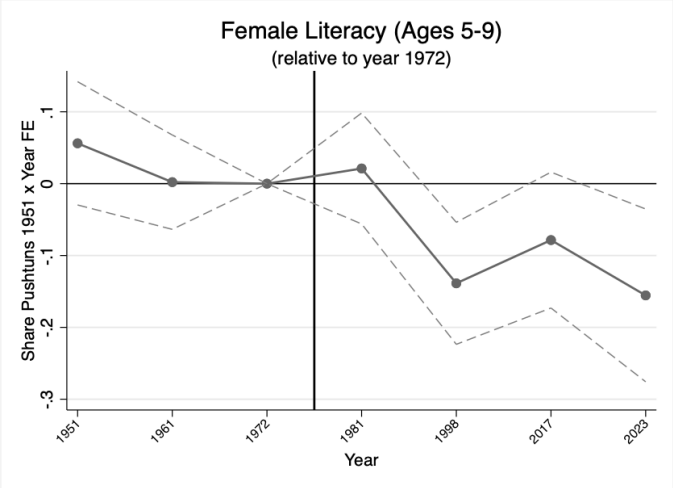
Figure 4: Zia's Impact on Pashtuns' Madrasa Enrollment in Pashtun Majority Districts



Notes: The figure presents an event-study analysis of the effects of General Zia's rule on the probability of attending a religious school (Deeni Madrasa). The dependent variable is the individual-level probability of ever attending a madrasa. The analysis uses a triple-difference design, interacting Pashtun ethnicity (1 if Pashto-speaking), Pashtun-majority district (1 if the district has a Pashto-speaking majority), and indicators for Zia exposure at madrasa age (1 if aged 5–16 during 1977–1988). This allows each ethnicity–district combination to have its own dynamic response. Cohorts on the x-axis represent birth years; maximal exposure occurs for those born in 1972, whose entire madrasa-age coincided with Zia's rule. The cohorts from 1932-1936 to 1957-1961 and cohorts from 1983-1987 to 2018-2019 had no exposure to Zia while they were madrasa-aged (5-16 y.o.). District-cohort, district-ethnicity, and ethnicity-cohort fixed effects are included, and standard errors are clustered at the district level.

Figure 5: General Zia Coup and Social Change: Event-Study

Panel A: General Zia and Female School Age Literacy



Panel B: General Zia and Underage Marriage



Notes: The figure presents an event-study analysis of the effects of General Zia's 1977 military coup on female literacy (ages 5–9) and female early-age marriages. Panel A uses the proportion of girls aged 5–9 attending any school in the district relative to the total number of girls in that age group as the dependent variable. Panel B uses the proportion of females aged 15–19 (or 10–19 in 1951) who are currently married, widowed, separated, or divorced relative to the total number of females in the same age group in the district. The analysis is based on a difference-in-differences design at the district-year level. The main regressor interacts the district-level Pashtun share in 1951 with a post-1976 treatment indicator. Pretreatment controls include district-level socioeconomic characteristics, such as literacy and urbanization rates. Data on female literacy and early-age marriages come from Pakistani population censuses, and the Pashtun share is based on the 1951 census. All specifications include district and year fixed effects, and standard errors are clustered at the district level.

Table 1: Effect of Share Pashtuns on Political Violence and Islamist Party Votes

Panel A. Political Violence and Share Pashtuns				
	Log of Political Violence			
	(1)	(2)	(3)	(4)
Pashtuns' Share 1998 × Post-Musharraf	1.991***	2.215***	2.243***	2.167***
	(0.359)	(0.324)	(0.462)	(0.532)
Pashtuns' Share 1998 × Post-Zia & Pre-Musharraf	-0.497***	-0.430***	-0.405	-0.071
	(0.155)	(0.153)	(0.274)	(0.264)
Year and District Fixed Effects	Yes	Yes	Yes	Yes
Balochi Share and Its Interactions	Yes	Yes	Yes	Yes
Time-Varying Controls	No	Yes	Yes	Yes
Service Delivery & State Capacity × Year FE	No	No	Yes	Yes
Productive capacity & Connectivity × Year FE	No	No	No	Yes
Mean Dep. Variable	-3.11	-3.11	-3.11	-3.11
Mean Indep. Variable	0.137	0.137	0.137	0.137
Observations	5512	5512	5512	5512
Panel B. Islamist Vote Share and Share Pashtuns				
	Islamist Vote Share			
	(1)	(2)	(3)	(4)
Pashtuns' Share 1998 × Post-Musharraf	0.157***	0.147***	0.128***	0.112***
	(0.042)	(0.040)	(0.038)	(0.037)
Pashtuns' Share 1998 × Post-Zia & Pre-Musharraf	0.030	0.028	0.011	-0.005
	(0.065)	(0.064)	(0.055)	(0.049)
Year and District Fixed Effects	Yes	Yes	Yes	Yes
Balochi Share and Its Interactions	Yes	Yes	Yes	Yes
Time-Varying Controls	No	Yes	Yes	Yes
Service Delivery & State Capacity × Year FE	No	No	Yes	Yes
Productive Capacity & Connectivity × Year FE	No	No	No	Yes
Mean Dep. Variable	0.06	0.06	0.06	0.06
Mean Indep. Variable	0.058	0.058	0.058	0.058
Observations	502	502	502	502

Note: The table reports difference-in-differences estimates of the effects of General Zia's (1977) and General Musharraf's (1999) military coups on political violence and Islamist vote share. Panel A uses the log of annual district-level political violence incidents (GTD, 1970–2021); Panel B uses the district-level share of votes for Islamist parties across national elections (1970–2018). The key regressors are Pashtun share in 1998 interacted with post-Musharraf period (1 if year $>$ 1999) and post-Zia pre-Musharraf period (1 if 1977 year 1999). Columns (1)–(4) sequentially add controls: column (1) includes district and year fixed effects and Balochi share interactions; column (2) adds time-varying literacy and urbanization; column (3) further interacts 1972 per-capita education and health facility stocks with year fixed effects; column (4) additionally includes 1972 wheat productivity and road density interacted with year fixed effects. All regressions include district and year fixed effects, and standard errors are clustered at the district level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 2: Madrasa Enrollment Among Pashtuns under Zia

	Madrasa Enrollment			
	(1)	(2)	(3)	(4)
Majority × Madrasa-Aged Exposure × Pashtun	0.04214***	0.03072***	0.02648***	0.02517***
	(0.00838)	(0.00693)	(0.00862)	(0.00815)
Madrasa-Aged Exposure × Pashtun	-0.03703***	-0.02587***	-0.02239***	-0.01955***
	(0.00808)	(0.00593)	(0.00806)	(0.00705)
Majority × Pashtun	-0.04080***	-0.03755***	0.00461	0.00546
	(0.00879)	(0.00885)	(0.00826)	(0.00809)
Majority × Madrasa-Aged Exposure	-0.00539*	-0.00751**	-0.00691**	-0.00795***
	(0.00308)	(0.00322)	(0.00284)	(0.00289)
Madrasa-Aged Exposure	-0.00057	-0.00029	-0.00030	-0.00034
	(0.00066)	(0.00061)	(0.00061)	(0.00061)
Majority	0.00931	0.00982	-0.00088	-0.00060
	(0.00741)	(0.00742)	(0.00068)	(0.00070)
Controls	Yes	Yes	Yes	Yes
District FEs	Yes	Yes	Yes	Yes
Cohort FEs	Yes	Yes	Yes	Yes
Ethnicity FEs	Yes	Yes	Yes	Yes
District-Cohort FEs	No	Yes	Yes	Yes
District-Etnicity FEs	No	No	Yes	Yes
Ethnicity-Cohort FEs	No	No	No	Yes
Observations	1,238,181	1,238,181	1,238,181	1,238,181

Note: The table reports estimates from triple-difference regressions examining the effect of exposure to General Zia's rule on madrasa enrollment among Pashtuns. The dependent variable is a binary indicator equal to one if a respondent has ever attended a religious school (Deeni Madrasa). The main regressor interacts Pashtun ethnicity (1 if Pashto-speaking), a Majority district indicator (1 if district is Pashtun-majority), and an indicator for exposure to Zia's rule at madrasa age (1 if aged 5–16 during 1977–1988). All specifications include district, ethnicity, and birth-cohort fixed effects, as well as controls for age, gender, and urban residence. Columns (2)–(4) progressively add district–cohort, district–ethnicity, and ethnicity–cohort fixed effects, respectively. Ethnicity is coded into seven categories (Baluchi, Punjabi, Pashto, Sindhi, Urdu, and Other). Birth cohorts are defined over 15-year intervals. Data come from the Pakistan Integrated Household Survey (PIHS), harmonized via IPUMS, waves 1991, 2007, 2011, 2013, and 2019. The regression includes 67 district clusters, and standard errors are clustered at the district level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 3: Zia Radicalized Pashtuns: *Female Literacy, Early-Age Marriages, Quran Readers*

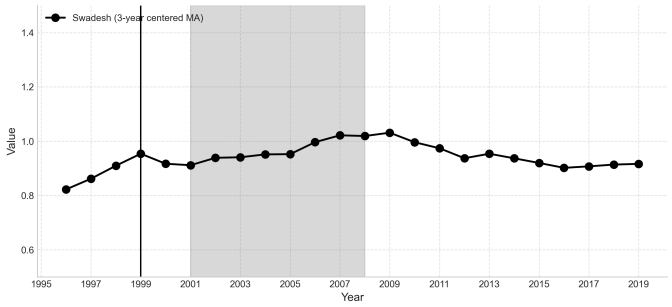
Panel A. Female Literacy (Ages 5-9)		
	Female Literacy (Ages 5-9)	
	(1)	(2)
Share Pashtuns in 1951 X Post Zia Coup 1977	-0.109***	-0.099***
	(0.039)	(0.024)
Year and District Fixed Effects	Yes	Yes
Controls	No	Yes
Mean Dep. Variable	.248	.248
Mean Indep. Variable	.181	.181
Observations	311	311
Panel B. Female Early-Age Marriages		
	Female Early-Age Marriages	
	(1)	(2)
Share Pashtuns in 1951 X Post Zia Coup 1977	0.104***	0.089**
	(0.039)	(0.039)
Year and District Fixed Effects	Yes	Yes
Controls	No	Yes
Mean Dep. Variable	.313	.313
Mean Indep. Variable	.177	.177
Observations	309	309

Note: This table reports difference-in-differences estimates of how district-level outcomes vary with historical Pashtun population shares following General Zia's 1977 military coup. The main explanatory variable is the interaction between the district share of Pashtuns in 1951 and an indicator equal to one for years after 1977. Panel A uses female literacy among school-age girls as the dependent variable, defined as the share of girls aged 5–9 attending school in the district-year. Panel B uses female early-age marriages, measured as the share of females aged 15–19 (or ages 10–19 in 1951) who are married, widowed, separated, or divorced, relative to the total female population in the same age group. Columns (2) include Year and District Fixed Effects, and control for district-level literacy and urbanization from the 1998 census. Standard errors are clustered at the district level.* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

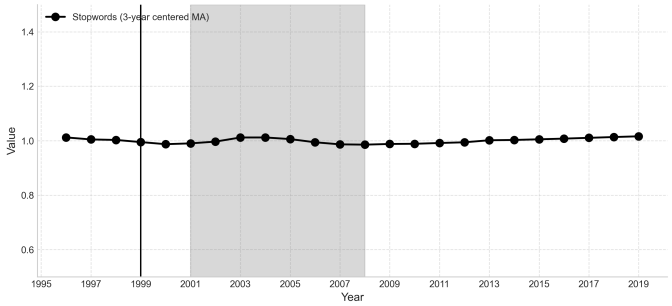
Appendix A: Additional Figures and Tables

Figure A1: Media Discourse on Secularization: Placebo

Panel A: Neutral Words

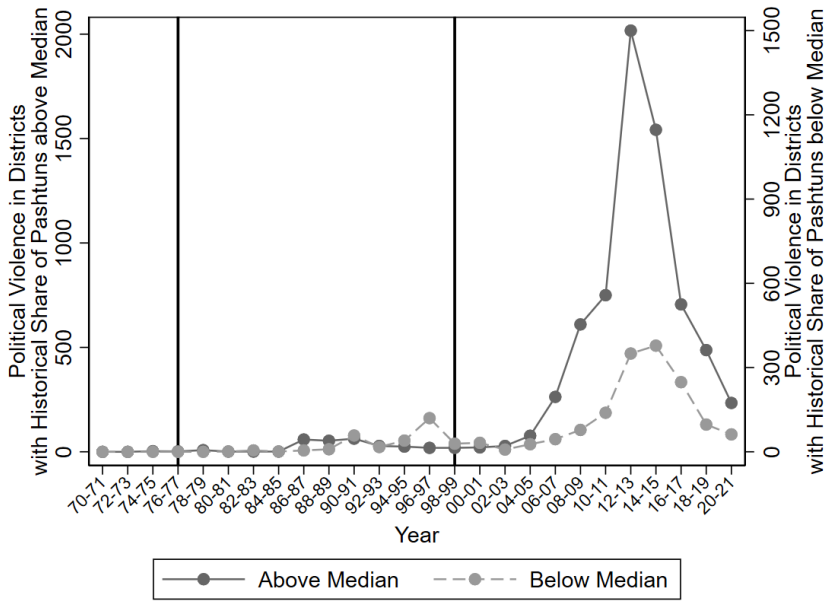


Panel B: Functional Words



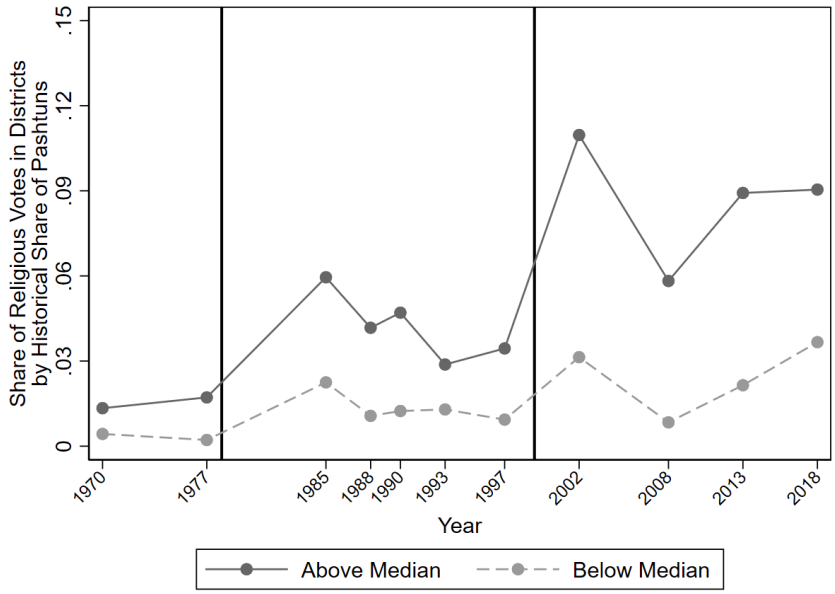
Notes: The figure depicts the absence of any remarkable impact of General Musharraf's rule on the use of placebo words in Pakistan's leading newspaper, Dawn, from 1995 to 2020. Panel A presents the relative frequency of neutral words, such as "day," "night," "year," "month," and "week", compared to their usage in 1998. Panel B shows the same measure for functional words, or stopwords, including "a," "an," "the," "of," "between," and similar terms. The frequency of a word or group of words is calculated as the number of this term's occurrences divided by the total number of words across all publicly available issues of the newspaper in a given year. Such normalization is necessary to eliminate the effects of large year-to-year variations in the number of articles available and the considerable differences in article lengths. The values are smoothed using a 3-year centered moving average. In all Panels, the gray shaded area highlights the period when General Musharraf served as President of Pakistan (2001–2008), and the black line marks the year of Musharraf's military coup (1999).

Figure A2: Political Violence Over Time by Pashtun Population Share



Notes: The unit of observation is District—Year. Political violence incidents represent the number of violent events, as defined by the Global Terrorism Database (GTD). To be included in the GTD, an incident must meet three criteria: (1) it must result from a conscious calculation by the perpetrator, (2) it must involve violence or the immediate threat of violence (against property or people), and (3) the perpetrators must be sub-national actors (GTD, 2021). The Share of Pashtuns represents the proportion of individuals reporting "Pushtu" as their mother tongue in the 1998 Pakistan census, relative to the total district population. The vertical line indicates the timing of General Musharraf's military coup in 1999.

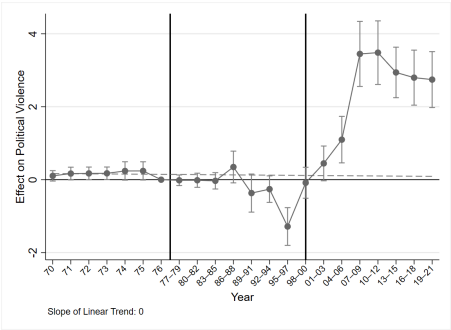
Figure A3: Islamist Vote Share and Pashtun Presence



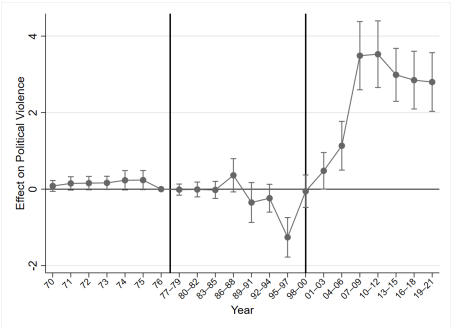
Notes: The unit of observation is District—Election Year. Islamist Vote Share in District is the proportion of the total valid votes polled in a district in an election year that goes to Islamist parties. The Historical Share of Pashtuns represents the proportion of individuals reporting "Pushtu" as their mother tongue in the 1998 Pakistan census, relative to the total district population. The vertical line indicates the timing of General Musharraf's military coup in 1999.

Figure A4: Rambachan and Roth (2023)'s Credible Approach to Parallel Trends: Political Violence

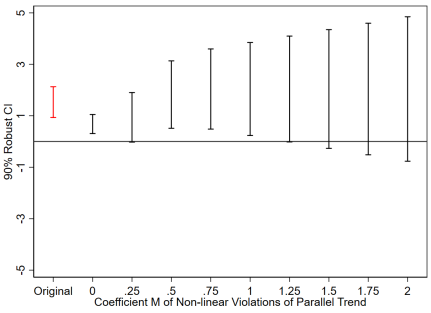
Panel A : Baseline event study



Panel B : Event study with linear trend violation adjustment



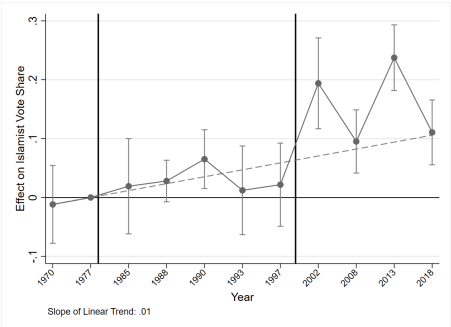
Panel C : Event study with bounded non-linear trend deviation



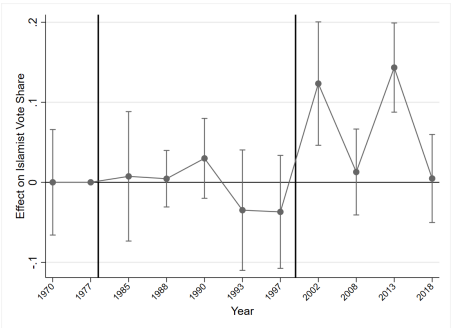
Notes: This figure examines robustness of the event-study estimates to deviations from parallel trends (Rambachan and Roth (2023)). Panel A overlays a linear trend estimated from pre-treatment years onto the event-study coefficients; Panel B shows coefficients adjusted for this trend. Panel C implements the "honest DiD" approach and reports 90% confidence sets for the average post-treatment effect under bounded deviations from parallel trends. The outcome variable is the logarithm of district-level political violence incidents. Panels A and B use 1976 as the baseline year. In Panel C, the baseline is 1998 to ensure the robustness check compares periods with no expected effect to periods where an effect may occur, reflecting a flat pre-trend through 1998. Specifications interact year indicators with district-level Pashtun shares and include district and year fixed effects, literacy and urbanization controls, and Balochi share interacted with post-Zia and post-Musharraf indicators. Standard errors are clustered at the district level.

Figure A5: Rambachan and Roth (2023)'s Credible Approach to Parallel Trends: Islamist Voting

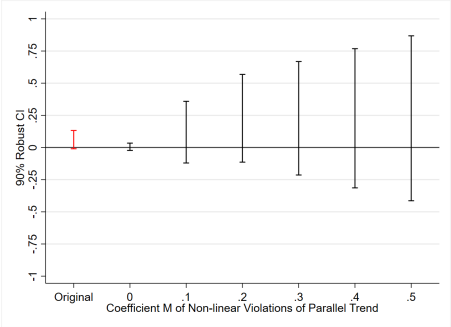
Panel A : Baseline event study



Panel B : Event study with linear trend violation adjustment



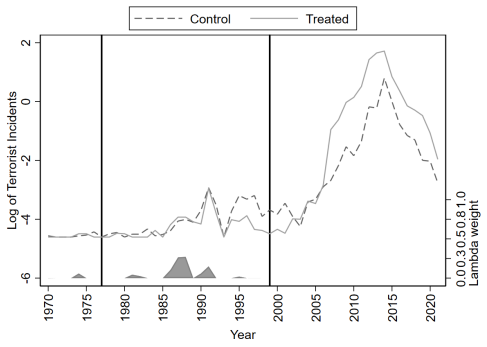
Panel C : Event study with bounded non-linear trend deviation



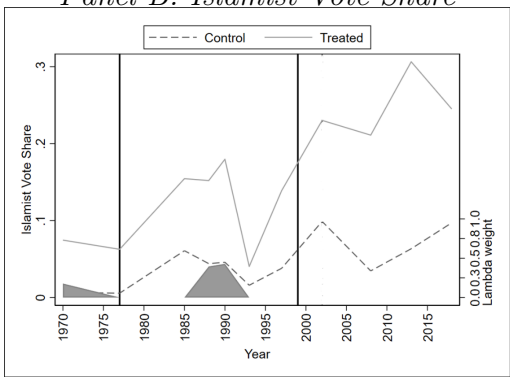
Notes: This figure examines robustness of the event-study estimates to deviations from parallel trends (Rambachan and Roth (2023)). Panel A overlays a linear trend estimated from pre-treatment years onto the event-study coefficients; Panel B shows coefficients adjusted for this trend. Panel C implements the "honest DiD" approach and reports 90% confidence sets for the average post-treatment effect under bounded deviations from parallel trends. The outcome variable is the district-level share of votes for Islamist parties. Panels A and B use 1977 as the baseline year. For years with missing party labels (1970, 1977, 1985), candidates' honorifics were used to infer ideological alignment. In Panel C, the baseline is 1998 to ensure the robustness check compares periods with no expected effect to periods where an effect may occur, reflecting a flat pre-trend through 1998. Specifications interact year indicators with district-level Pashtun shares and include district and year fixed effects, literacy and urbanization controls, and Balochi share interacted with post-Zia and post-Musharraf indicators. Standard errors are clustered at the district level.

Figure A6: Impact of the Coups: Synthetic Difference-in-Differences

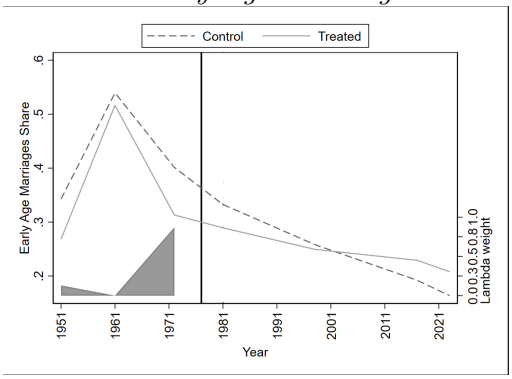
Panel A: Log Political Violence Incidents



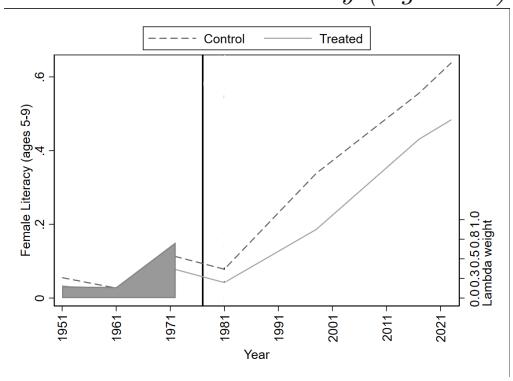
Panel B: Islamist Vote Share



Panel C: Early Age Marriages Share



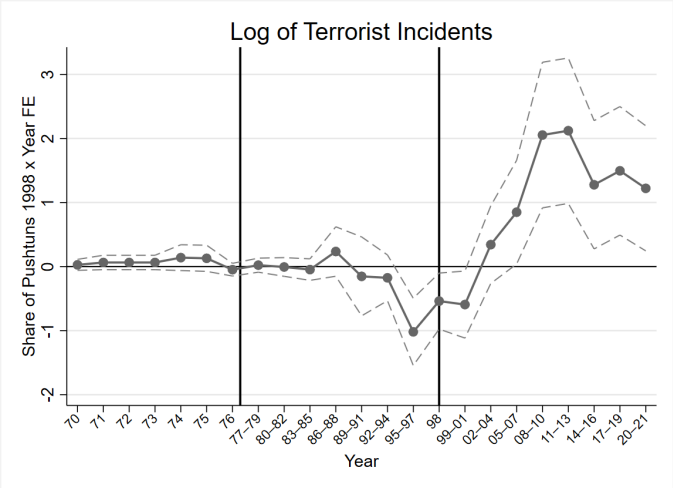
Panel D: Female Literacy (Ages 5-9)



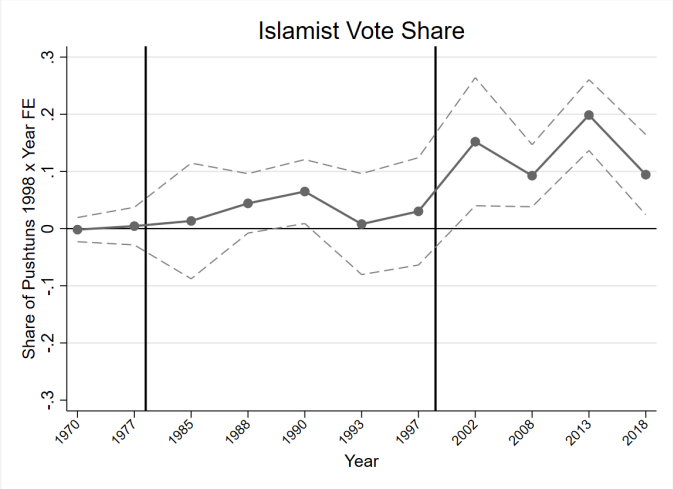
Notes: This figure presents synthetic difference-in-differences (SDID) estimates. For Panels A, B the estimates are for the Musharraf's 1999 Coup's impact on *Log Political Violence Incidence* and *Islamist Vote Share*. For the Panels C and D the estimates are for the Zia's 1977 Coup's impact on Pashtuns' Radicalization: *Share of Madrasa Attendance* and *Female Literacy (for ages 5-9)*. The panels report SDID estimates using the cluster bootstrap method as outlined in Algorithm 2 of Arkhangelsky et al. (2021). The Synthetic DID estimator is applied to the specifications from Table 1 and Table 3. Each Panels' plot shows the treatment outcome trend (solid line) and the synthetic control outcome trend (dashed line) along with time-specific weights. The grey area on the graph represents the weights assigned to the corresponding years that contributed to the construction of the synthetic control.

Figure A7: Synthetic DiD: Political Violence and Islamist Vote Share

Panel A: Political Violence



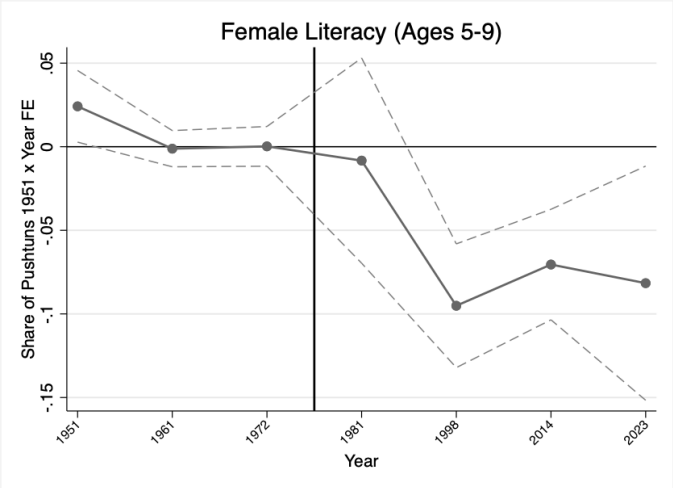
Panel B: Islamist Vote Share



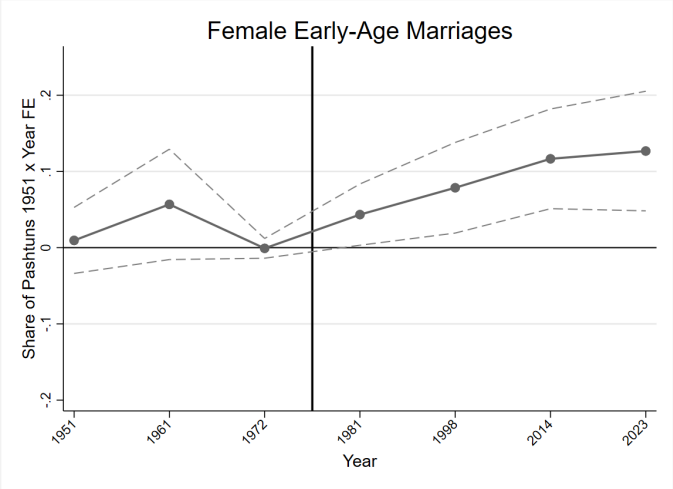
Notes: This table reports estimates from event-study regressions analyzing the effects of General Zia's (1977) and General Musharraf's (1999) military coups on district-level outcomes. Both Panels introduce the synthetic difference-in-differences estimator by Arkhangelsky et al. (2021), applied in an event-study framework as suggested in Ciccia et al. (2024). The unit of observation is the district-year. Panel A uses the logarithm of political violence incidents (Global Terrorism Database, GTD, 2021) as the dependent variable. Panel B uses the district-level share of votes for Islamist parties, calculated as the fraction of votes cast for listed Islamist parties in national elections. The main regressors are interactions of post-coup indicators with district-level ethnic shares: high-Pashtun districts (Pashtun share greater than or equal to the mean) and high-Baloch districts (Baloch share greater than or equal to the mean), for both the post-Zia (1977–1998) and post-Musharraf (1999 and later) periods. Specifications include district and year fixed effects and control for literacy and urbanization rates, as well as Baloch share interacted with post-Zia and post-Musharraf indicators. Standard errors are clustered at the district level.

Figure A8: General Zia Coup and Social Change: Synthetic Differences in Differences

Panel A: General Zia and Female School Age Literacy



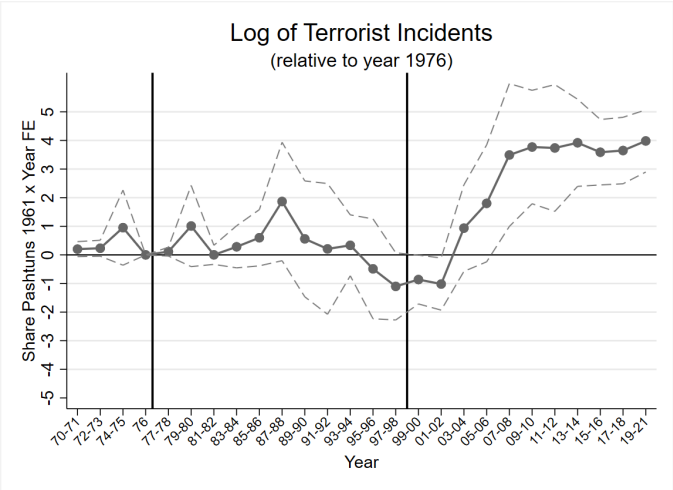
Panel B: General Zia and Underage Marriage



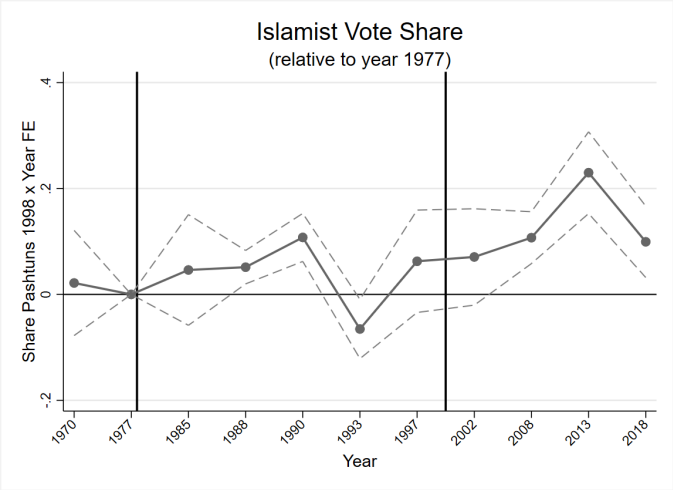
Notes: The figure introduces the synthetic difference-in-differences estimator by Arkhangelsky et al. (2021), applied in an event-study framework as suggested in Ciccia et al. (2024), and shows the estimates of the effect of General Zia's 1977 military coup on district-level female literacy and female early-age marriages. The unit of analysis is the district-year. Panel A reports female literacy, defined as the proportion of girls aged 5–9 attending school relative to the total number of girls in that age group. Panel B reports female early-age marriages, defined as the proportion of females aged 15–19 (or 10–19 for 1951) who are currently married, widowed, separated, or divorced, relative to the total female population of the same age group in the district. The share of Pashtuns is measured using the 1951 census. Both Panels include pre-treatment controls for district-level literacy and urbanization. Standard errors are computed using the cluster bootstrap method outlined in Algorithm 2 of Arkhangelsky et al. (2021), with 1000 bootstrap replications.

Figure A9: Political Violence and Islamist Vote Share Over Time: 1961 Pashtun Share

Panel A : Political Violence. Difference-in-differences



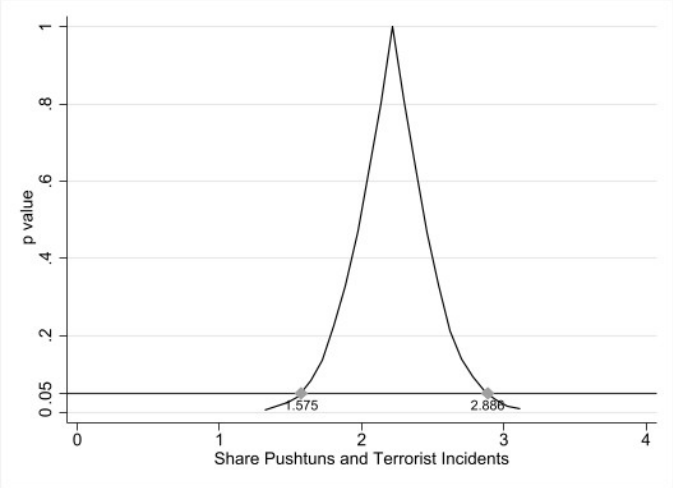
Panel B : Islamist Vote Share. Difference-in-differences



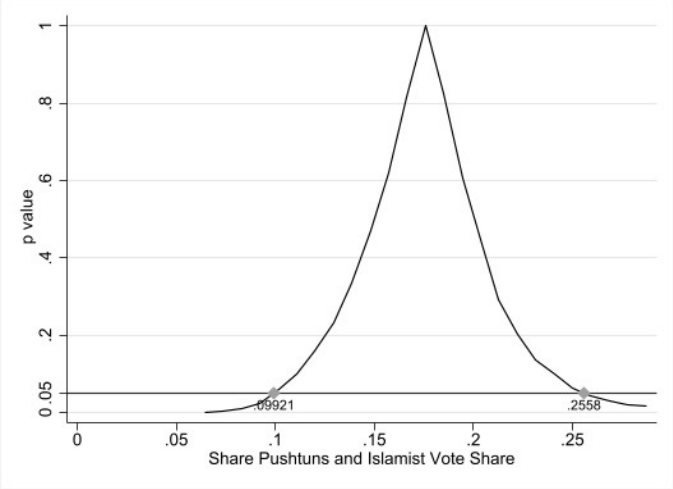
Notes: This table presents event–study analyses of the effects of General Zia's 1977 and General Musharraf's 1999 military coups on two outcomes: political violence (Panel A) and Islamist vote share (Panel B). In Panel A, the dependent variable is the logarithm of district-level political violence incidents from the Global Terrorism Database (GTD, 2021), with 1976 serving as the baseline year. In Panel B, the dependent variable is the district-level share of votes cast for Islamist parties, with 1977 as the baseline year; for years where party labels were missing (1970, 1977, and 1985), candidates' honorifics were used to infer ideological alignment. In both panels, the key independent variable is the district-level share of Pashtuns in 1961 (based on mother tongue in the 1961 Pakistan census), interacted with years indicators. All specifications include district and year fixed effects and control for district-level socioeconomic characteristics such as literacy and urbanisation rates. Standard errors are clustered at the district level. The two vertical black lines in the figures indicate the timing of the 1977 and 1999 military coups.

Figure A10: Confidence Interval by Wild Bootstrap

Panel A: Log Political Violence Incidents



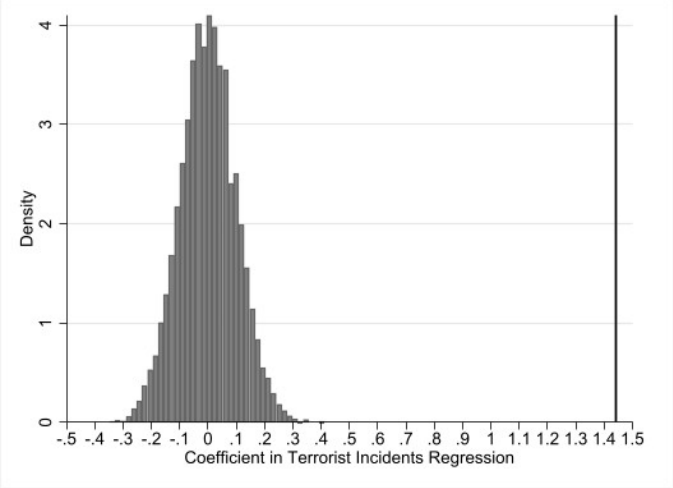
Panel B: Islamist Vote Share



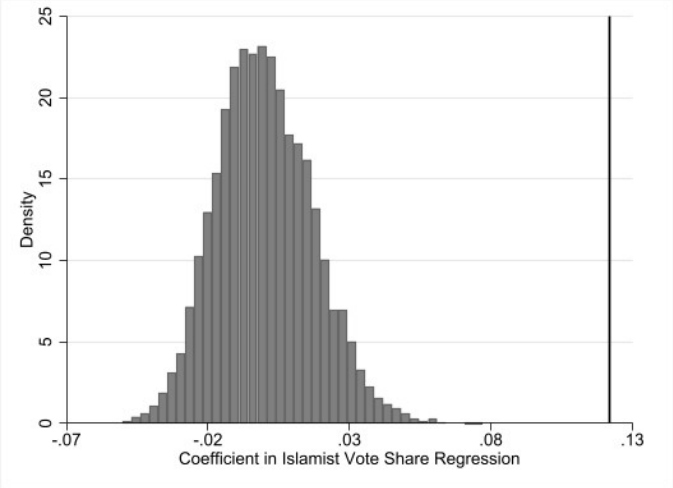
Notes: The figure presents the estimated distribution curves for the interaction of the 1998 Pashtun share with the post-Musharraf coup dummy, using the wild cluster bootstrap method outlined by Cameron et al. (2008). The first explanatory variable, Post-Musharraf × Pashtun Share, captures the effect of the post-1999 period. The second explanatory variable, Post-Zia Pre-Musharraf × Pashtun Share, captures the effect of the 1977–1999 period. Panel A illustrates the 90% confidence interval for the estimated effect of Musharraf's coup on political violence, measured as the logarithm of district-level political violence incidents. Panel B shows the 90% confidence interval for the effect on Islamist vote share, defined as the proportion of total votes cast for listed Islamist parties in each district. Both panels include controls for district literacy, urbanization, and Balochi share interacted with post-Zia and post-Musharraf periods, as well as district and year fixed effects. Standard errors are clustered at the district level.

Figure A11: Permutation Inference Test: Political Violence and Islamist Vote Share

Panel A: Log Political Violence Incidents



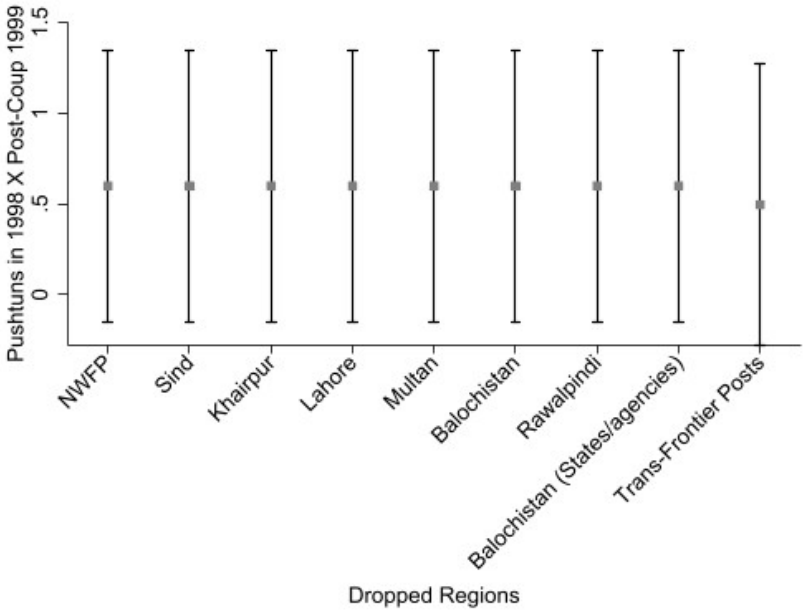
Panel B: Islamist Vote Share



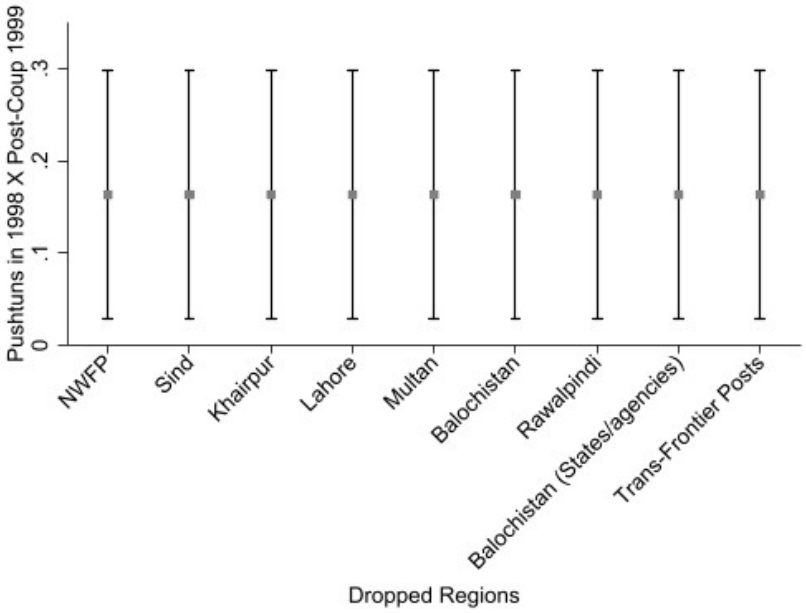
Notes: The figure presents the results of a permutation inference test using 10,000 permutations to evaluate the robustness of the estimated effects of both Post-Musharraf × Pashtun Share and Post-Zia Pre-Musharraf × Pashtun Share. Panel A shows the distribution of coefficient estimates for the logarithm of district-level political violence incidents, and Panel B presents the distribution for district-level Islamist vote share. Each histogram represents the density of permutation estimates, with the vertical line indicating the actual estimated coefficient. Both specifications include controls for district literacy, urbanization, and Balochi share interacted with the post-Zia and post-Musharraf periods, as well as district and year fixed effects.

Figure A12: Impact on Political Violence and Islamist Voting by Sequentially Excluding Regions

Panel A: Log Political Violence Incidents



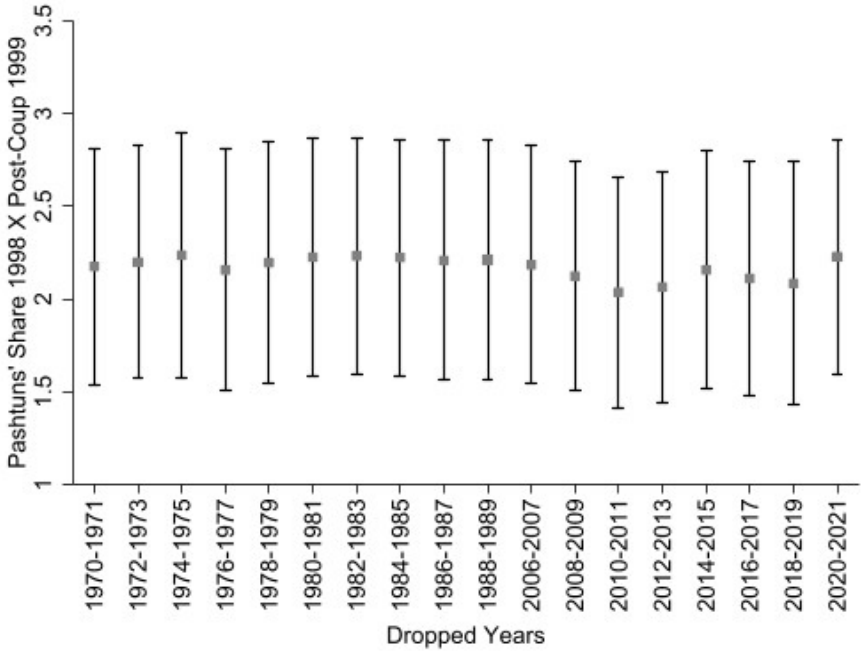
Panel B: Islamist Vote Share



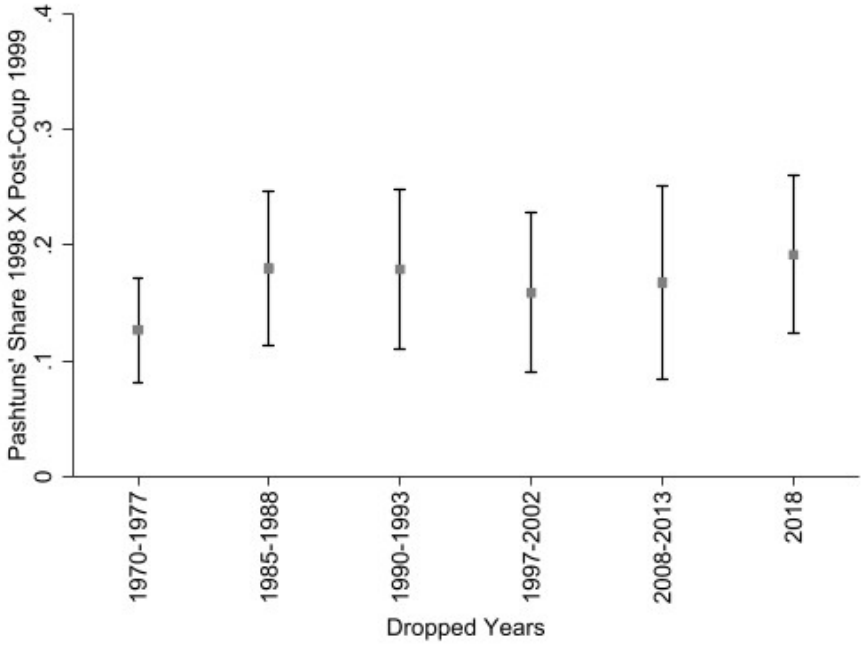
Notes: The figure presents the estimated effects of the 1999 Musharraf Coup on *Log Political Violence Incidents* (Panel A) and *Islamist Vote Share* (Panel B) while sequentially excluding individual regions (divisions) to assess robustness. The key explanatory variables are the interaction terms *Post-Musharraf by Pashtun Share* and *Post-Zia and Pre-Musharraf by Pashtun Share*. All regressions include district and year fixed effects, control for literacy and urbanization, as well as Baloch population share interacted with post-Zia and post-Musharraf periods, and allow for district-specific linear trends.

Figure A13: The Impact's Robustness to Time Period Choice

Panel A: Log Political Violence Incidents

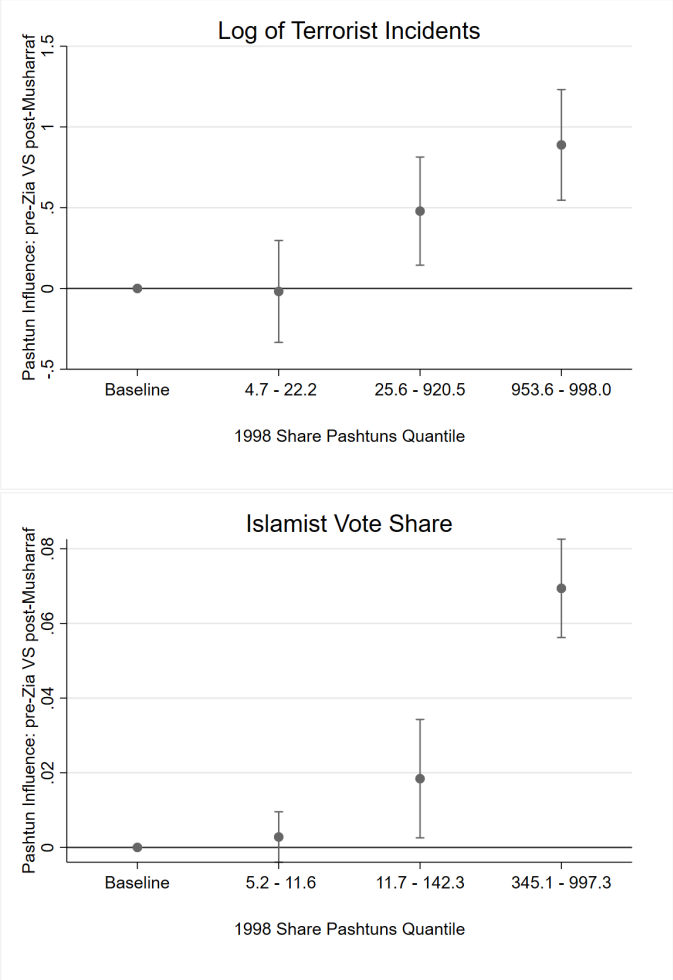


Panel B: Islamist Vote Share



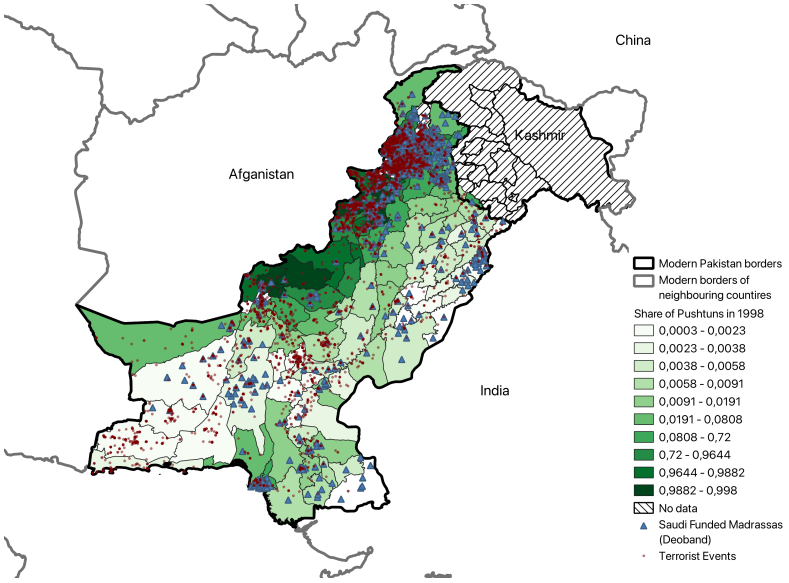
Notes: The figure presents the estimated effects of the 1999 Musharraf Coup on *Log Political Violence Incidents* (Panel A) and *Islamist Vote Share* (Panel B) across different time subsamples that sequentially exclude years to assess robustness. The key explanatory variables are the interaction terms *Post-Musharraf by Pashtun Share* and *Post-Zia and Pre-Musharraf by Pashtun Share*. All regressions include district and year fixed effects, control for literacy and urbanization, as well as Baloch population share interacted with post-Zia and post-Musharraf periods, and allow for district-specific linear trends.

Figure A14: Adjustment with Low-Exposure Comparison Applying Callaway et al. (2024)



Notes: This figure displays the estimated effects of the 1999 Musharraf Military Coup on *Log of Political Violence Incidents* (Panel A) and *Islamist Vote Share* (Panel B) across regions grouped by 1998 Share of Pashtuns. Each coefficient corresponds to a separate intensity quantile, with the lowest-share-Pashtuns regions serving as the reference group. The estimation implements the nonparametric synthetic difference-in-differences approach proposed by Callaway et al. (2024), accounting for heterogeneous treatment effects by dosage. Both pre-Zia and post-Musharraf periods are considered, and all regressions include controls for literacy, urbanization, and Baloch population share interacted with the respective post-Zia and post-Musharraf periods, as well as district and year fixed effects. Vertical lines represent 95 percent confidence intervals.

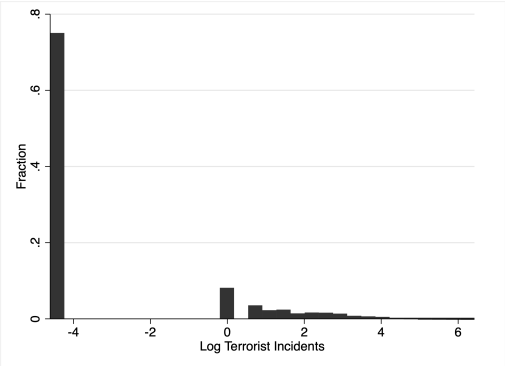
Figure A15: Share Pashtuns, *Deobandi Madrasas* and Violence



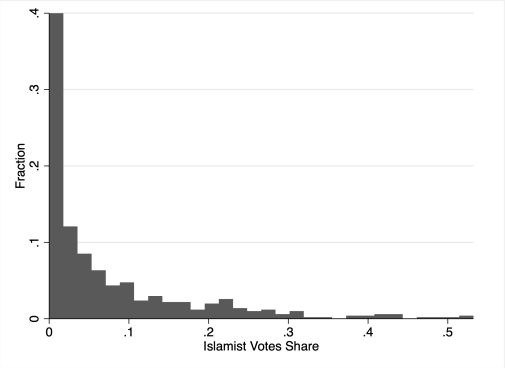
Notes: This map shows the geographic distribution of modern madrasas, the share of Pashtuns in 1998, and political violence across districts. The share of Pashtuns in 1998 is defined as the proportion of individuals who reported "Pushtu" as their mother tongue in the 1998 Pakistan census, relative to the district's total population. Data on madrasas is sourced from the Ministry of Education, Government of Pakistan website. Political violence is measured as the number of incidents involving the "threatened or actual use of illegal force and violence by a non-state actor to achieve political, economic, religious, or social objectives through fear, coercion, or intimidation," as defined by the Global Terrorism Database.

Figure A16: Distributions of Dependent Variables

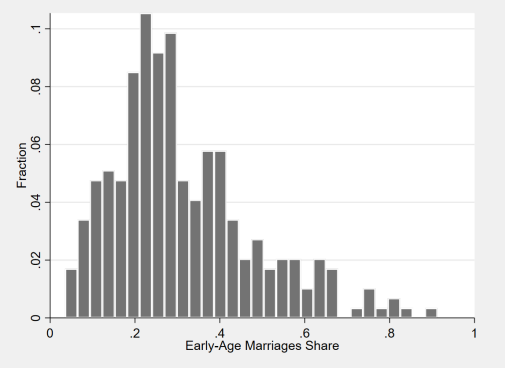
Panel A: Log Political Violence Incidents



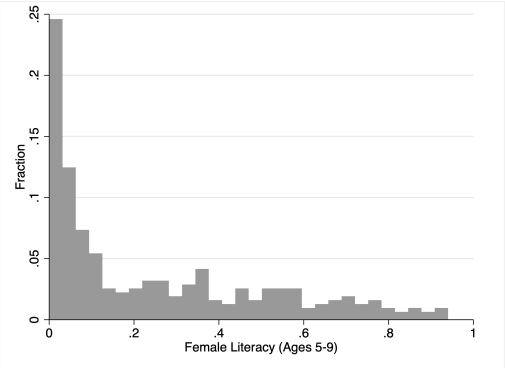
Panel B: Islamist Vote Share



Panel C: Early-Age Marriages Share



Panel D: Female Literacy (Ages 5-9)



Notes: The figure presents the distributions of key dependent variables analyzed in the study. Panel A shows the distribution of Log Political Violence Incidents, while Panel B illustrates the distribution of Islamist Vote Share. Panel C captures the distribution of Share of Madrasa Attendance, and Panel D presents the distribution of Female Literacy (Ages 5-9). Each histogram represents the fraction of observations within each bin.

Table A1: Summary statistics

	Mean	Median	SD	Min	Max
Panel A: Dependent veriables (varies by year-region)					
Political Violence Incidents	2.614	0.000	15.251	0.000	616.000
Log of Political Violence Incidents	-3.130	-4.605	2.637	-4.605	6.423
Islamist Votes Share	0.070	0.029	0.098	0.000	0.549
Early Marriages Share	0.313	0.271	0.167	0.035	0.913
Female Literacy (Ages 5-9)	0.249	0.126	0.258	0.000	0.940
Panel B: Population (varies by region)					
Share Pashtuns in 1998	0.323	0.024	0.430	0.000	0.998
Share Baloch in 1998	0.149	0.000	0.314	0.000	0.997
Share Pashtuns in 1951	0.185	0.002	0.344	0.000	1.000
Panel C: Time-Varying Control Variables (varies by region-year)					
Literacy	0.270	0.218	0.175	0.010	0.824
Urbanization	0.233	0.173	0.208	0.000	1.000
Panel D: Individual-Level Data for Madrasa Analysis					
Indicator of Attending Madrasa	0.006	0.000	0.080	0.000	1.000
Madrasa-Aged Cohorts Exposed to Zia	0.215	0.000	0.411	0.000	1.000
Indicator of Pashtun-Majority District	0.273	0.000	0.446	0.000	1.000
ethnicity	4.121	4	1.409	1	6
Gender	0.489	0.000	0.500	0.000	1.000
Age	23.923	19.000	18.630	0.000	120.000
Urbanization Rate	0.678	1.000	0.467	0.000	1.000

Note: The table presents descriptive statistics for the key variables used in the analysis, covering regions in 1998 and 1951 Pakistani borders. Panel A reports summary statistics for dependent variables, including Political Violence, Islamist votes share, share of madrasa attendance, and Female Literacy (Ages 5-9). Panel B presents population characteristics. Panel C includes time-varying control variables, such as literacy and urbanization. Data sources include records from the Global Terrorism Database (GTD), the Pakistan censuses.

Table A2: Robustness of Results Using Synthetic Difference-in-Differences

Panel A. Post Musharraf Coup in 1999		
	Log of Politically Violent Incidents	Islamist Vote Share
	(1)	(2)
Share Pashtuns in 1998 X Post Musharraf coup 1999	1.184***	0.104***
	(0.382)	(0.021)
Year and District Fixed Effects	Yes	Yes
Time-Varying Controls	Yes	Yes
Balochi Share and Its Interactions	Yes	Yes
Mean Dep. Variable	-3.13	0.067
Observations	5876	550
Panel B. Post Zia Coup in 1977		
	Early-Age Marriages	Female Literacy (Ages 5-9)
	(1)	(2)
Share Pashtuns in 1951 X Post Zia coup 1977	0.093***	-0.062***
	(0.028)	(0.018)
Year and District Fixed Effects	Yes	Yes
Time-Varying Controls	Yes	Yes
Mean Dep. Variable	0.313	0.246
Observations	294	287

Note: The figure presents Synthetic Difference-in-Differences (SDID) estimates following Arkhangelsky et al. (2021). Panels A and B show district-level political outcomes: log political violence incidents and Islamist vote share, with key regressors interacting 1998 Pashtun and Baloch shares with post-Musharraf years. Panels C and D show social outcomes: share of underage female marriages and female literacy (ages 5–9), with key regressors interacting 1951 Pashtun share with post-Zia years. All models include district and year fixed effects and controls for literacy and urbanization. Standard errors are computed using the cluster bootstrap method at the district level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A3: Zia Radicalized Pashtuns: *Quran Readers*

Quran Readers Share among Literates		
	Quran Readers Share	
	(1)	(2)
Share Pashtuns in 1951 X Post Zia Coup 1977	2.239*	1.452*
	(1.247)	(0.798)
Year and District Fixed Effects	Yes	Yes
Controls	No	Yes
Mean Dep. Variable	2.426	2.426
Mean Indep. Variable	.155	.155
Observations	166	166

Note: This table reports difference-in-differences estimates of the effect of General Zia's 1977 military coup on the share of Quran readers among literate individuals in the district. The main explanatory variable is the interaction between the district-level share of Pashtuns in 1951 and an indicator equal to one for years after 1977. The dependent variable is the share of Quran readers among all literate individuals in the district. Due to data availability, this measure is constructed as follows: in 1951, it is based on the number of individuals reported as able to read the Quran; in 1961, it includes individuals reported as able to read the Quran or, where unavailable, individuals able to read Arabic; in 1981, it includes individuals who can read or are learning to read the Quran; and in 1998, it includes all individuals reported as able to read the Quran. Column (2) includes controls for urbanization and the interaction of the district-level Balochi share with the post-coup indicator. Standard errors are clustered at the district level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A4: Pashtuns and Military Operations — Events, Fatalities, Injuries, and Arrests

	Military Operations	Fatalities	Injuries	Arrests
	(1)	(2)	(3)	(4)
Share Pashtuns 1998 × Post Musharraf Coup 1999	-1.160**	-1.680***	-0.534	-1.185***
	(0.450)	(0.458)	(0.394)	(0.438)
Time and District FEs	Yes	Yes	Yes	Yes
District Specific Linear Trends	Yes	Yes	Yes	Yes
Baloch 1998 × Year FE	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes
Mean Dep. Var.	-3.647	-3.945	-3.957	-4.115
Observations	1536	1536	1536	1536

Note: The table presents the effects of the 1999 Musharraf's Coup on the number of Military Operations and the numbers of people either killed, injuried or arrested within these operations. The data for the outcome variables are derived from the BFRS Political Violence in Pakistan Dataset containing incident-level data on political violence in Pakistan from January 1988 to December 2010 based on press reporting. Column (1) uses the logged total number of military operations (connected with both military/paramilitary/police selective violence and military/paramilitary/police attack on non-state combatants) as the dependent variable. Columns (2), (3) and (4) use the logged numbers of people who were, correspondingly, either killed, injuried, or arrested within these events. All regressions include district and year FEs, control for literacy, urbanization, Baloch population share interacted with year FEs, and allow for district-specific linear trends. Standard errors are clustered at the district level * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A5: Share Pashtuns and Alternative Mechanisms

Alternative Outcomes and 1998 Pashtuns				
	Literacy	Urbanization	Registered Voters	Turnout
Pashtuns' Share 1998 ×				
Post-Musharraf	-0.054	-0.135***	-12.314	-9.358***
	(0.043)	(0.038)	(9.226)	(3.069)
Pashtuns' Share 1998 ×				
Post-Zia & Pre-Musharraf	-0.025	-0.071*	7.130	3.185*
	(0.019)	(0.039)	(4.732)	(1.643)
Year and District Fixed Effects	Yes	Yes	Yes	Yes
Balochi Share and Its Interactions	Yes	Yes	Yes	Yes
Time-Varying Controls	No	No	Yes	Yes
Mean Dep. Variable	.271	.232	26.759	13.488
Mean Indep. Variable	.137	.137	.057	.057
Observations	5512	5512	506	506

Note: The table reports estimates of the effect of the district-level 1998 Pashtun population share on alternative development and political outcomes. Columns 1–2 use literacy and urbanization rates as dependent variables, measured in the 1998 Census, while columns 3–4 use voter registration and turnout, defined as the share of registered voters and voter participation relative to the total district population. For literacy and urbanization, the models include district and year fixed effects, the Baloch population share interacted with year fixed effects, and standard errors clustered at the district level. For voter outcomes, the models additionally include baseline 1972 district characteristics (education, health, wheat productivity, and road density) interacted with year fixed effects. The main explanatory variables are interactions of Pashtun population share with political period indicators: Post-Musharraf equals 1 for years following the Musharraf coup, and Post-Zia Pre-Musharraf equals 1 for years after the Zia coup but before the Musharraf coup.* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A6: Robustness to applying Chen and Roth (2024)

Panel A: Value of X if Political Violence Incidents = 0				
	Political Violence Incidents			
	(1)	(2)	(3)	(4)
	X = 0	X = -0.1	X = -1	X = -5
Pashtuns' Share 1998 × Post-Musharraf	0.809***	0.840***	1.114***	2.334***
	(0.166)	(0.168)	(0.194)	(0.340)
Pashtuns' Share 1998 ×				
Post-Zia & Pre-Musharraf	-0.089	-0.096	-0.162**	-0.458***
	(0.059)	(0.060)	(0.075)	(0.162)
Year and District Fixed Effects	Yes	Yes	Yes	Yes
Balochi Share and Its Interactions	Yes	Yes	Yes	Yes
Time-Varying Controls	Yes	Yes	Yes	Yes
Mean Log of Political Violence Incidents	.325	.25	-.425	-3.427
Mean Share of Pashtuns in 1998	.137	.137	.137	.306
Observations	5512	5512	5512	5772
Panel B: Alternate Definitions of Dependent Variable				
	(1)	(2)	(3)	(4)
	Dummy	Levels	Log(X+1)	Asin(X)
	at least one attack			
Pashtuns' Share 1998 × Post-Musharraf	0.305***	6.582**	0.833***	0.171***
	(0.043)	(3.035)	(0.154)	(0.049)
Pashtuns' Share 1998 ×				
Post-Zia & Pre-Musharraf	-0.074	-1.188	-0.119**	-0.070***
	(0.025)	(0.060)	(0.057)	(0.026)
Year and District Fixed Effects	Yes	Yes	Yes	Yes
Balochi Share and Its Interactions	Yes	Yes	Yes	Yes
Time-Varying Controls	Yes	Yes	Yes	Yes
Mean Dep. Var.	.249	2.614	.414	.154
Mean Share Pashtuns in 1998	.323	.323	.323	.323
Observations	5512	5512	5512	4569

Notes: Robust standard errors, clustered at the district level, are reported in parentheses. The dependent variable is defined as the logarithm of Terrorist Incidents when it is non-zero in Panel A, and X when the number of Politically Violent Incidents is zero, where X takes values of 0, -0.1, -1, and -5 in columns 1 through 4, respectively. In Panel B, the dependent variable is defined as: (1) a dummy variable equal to 1 if there is at least one terrorist attack; (2) the number of terrorist incidents (Levels); (3) the natural logarithm of (number of terrorist incidents + 1); and (4) the arcsin transformation of the square root of the number of terrorist incidents (Asin(X)). "Incidents" represents the number of politically violent incidents, as defined by the Global Terrorism Database (GTD) as "the threatened or actual use of illegal force and violence by a non-state actor to achieve a political, economic, religious, or social goal through fear, coercion, or intimidation." The share of Pashtuns in 1998 is the proportion of individuals in a district whose mother tongue was reported as "Pushtu" in the 1998 Pakistan census, relative to the district's total population. "Post-Musharraf Coup" is a dummy variable that switches from 0 to 1 starting in 1999, the year of the military coup. Control variables include "Literacy," defined as the percentage of the district population that can read and write, and "Urbanization," the percentage of the district population residing in urban areas. The unit of observation is district-year, with 111 districts. $^{*}p < 0.10,^{**}p < 0.05,^{***}p < 0.01$.

Table A7: Effect of Pashtun Share on Political Violence: PPML Estimates

Political Violence and Share of Pashtuns				
	Number of Politically Violent Incidents (PPML)			
	(1)	(2)	(3)	(4)
Pashtuns' Share 1998 × Post-Musharraf	8.575***	9.070**	10.922**	5.812*
	(3.191)	(3.846)	(4.279)	(3.443)
Pashtuns' Share 1998 ×				
Post-Zia & Pre-Musharraf	-3.057	-2.828	-1.421	-3.320
	(2.364)	(2.434)	(2.617)	(2.364)
Year and District Fixed Effects	Yes	Yes	Yes	Yes
Balochi Share and Its Interactions	Yes	Yes	Yes	Yes
Time-Varying Controls	No	Yes	Yes	Yes
Service Delivery & State Capacity × Year	No	No	Yes	Yes
Productive Capacity & Connectivity × Year	No	No	No	Yes
Mean Dependent Variable	3.033	3.033	3.033	3.033
Mean Independent Variable	0.154	0.154	0.154	0.154
Observations	4888	4888	4888	4888

Note: This table reports estimates from Poisson pseudo–maximum likelihood (PPML) regressions of the annual number of politically violent incidents and Islamist vote share on the 1998 district-level Pashtun population share, presented as average marginal effects. PPML accounts for heteroskedasticity and the large number of zero-valued outcomes. The analysis identifies changes around General Zia's 1977 coup and General Musharraf's 1999 coup relative to the pre-Zia baseline. The main regressors are interactions of Pashtun share with Post-Musharraf (1 if year is after 1999) and Post-Zia Pre-Musharraf (1 if year is between 1977 and 1999, inclusive). Columns (1)–(4) sequentially add controls: column (1) includes district and year fixed effects and Baloch share interactions; column (2) adds time-varying literacy and urbanization; columns (3)–(4) additionally include 1972 per-capita education, health, wheat productivity, and road density interacted with year. Standard errors are clustered at the district level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A8: Robustness to using Share Pashtuns for 1961 year

Panel A. Political Violence and Share Pashtuns 1961				
	Log of Political Violence			
	(1)	(2)	(3)	(4)
Pashtuns' Share 1961 × Post-Musharraf	2.400***	2.262***	1.875**	2.141**
	(0.653)	(0.818)	(0.778)	(1.002)
Pashtuns' Share 1961 ×				
Post-Zia & Pre-Musharraf	-0.500	-0.586	-0.869	-0.109
	(0.436)	(0.496)	(0.723)	(0.588)
Year and District Fixed Effects	Yes	Yes	Yes	Yes
Balochi Share and Its Interactions	Yes	Yes	Yes	Yes
Controls (time-varying)	No	Yes	Yes	Yes
Service delivery and State Capacity × Year FE	No	No	Yes	Yes
Productive capacity and connectivity × Year FE	No	No	No	Yes
Mean Dep. Variable	-2.83	-2.83	-2.83	-2.83
Mean Indep. Variable	0.056	0.056	0.056	0.056
Observations	1560	1560	1560	1560
Panel B. Islamist Vote Share and Share Pashtuns 1961				
	Islamist Vote Share			
	(1)	(2)	(3)	(4)
Pashtuns' Share 1961 × Post-Musharraf	0.147***	0.136***	0.061***	0.062***
	(0.044)	(0.043)	(0.018)	(0.020)
Pashtuns' Share 1961 ×				
Post-Zia & Pre-Musharraf	0.024	0.019	-0.066*	-0.077**
	(0.071)	(0.071)	(0.038)	(0.037)
Year and District Fixed Effects	Yes	Yes	Yes	Yes
Balochi Share and Its Interactions	Yes	Yes	Yes	Yes
Controls (time-varying)	No	Yes	Yes	Yes
Service delivery and State Capacity × Year FE	No	No	Yes	Yes
Productive capacity and connectivity × Year FE	No	No	No	Yes
Mean Dep. Variable	0.068	0.068	0.068	0.068
Mean Indep. Variable	0.061	0.061	0.061	0.061
Observations	328	328	328	328

Note: The table reports difference-in-differences estimates of how the Pashtun population share relates to outcomes around Zia's (1977) and Musharraf's (1999) coups relative to the pre-Zia baseline. Panel A uses annual political violence (GTD definition of terrorism) for 1970–2021. Panel B uses the combined vote share of Islamist parties in all national elections from 1970 to 2018. Pashtun and Baloch population shares come from the Pakistan census; Pashtun share is measured in 1961 as the fraction reporting "Pushtu" as mother tongue. Column (1) includes district and year fixed effects and controls for Baloch share and its interactions. Column (2) adds time-varying literacy and urbanization. Column (3) interacts 1972 per-capita education and health facility stocks with year fixed effects. Column (4) adds 1972 wheat productivity (tons per hectare) and 1972 road density (road miles per square mile), each interacted with year fixed effects. Standard errors are clustered at the district level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A9: Robustness of the Main Coefficients to Flexible Trends by 1961 Characteristics

Panel A. Political Violence and Share Pashtuns				
	Log of Political Violence			
	(1)	(2)	(3)	(4)
Pashtuns' Share 1998 × Post-Musharraf	1.991***	2.215***	2.107***	2.098**
	(0.359)	(0.324)	(0.536)	(0.803)
Pashtuns' Share 1998 ×				
Post-Zia & Pre-Musharraf	-0.497***	-0.430***	-0.309	0.281
	(0.155)	(0.153)	(0.290)	(0.321)
Year and District Fixed Effects	Yes	Yes	Yes	Yes
Balochi Share and Its Interactions	Yes	Yes	Yes	Yes
Controls (time-varying)	No	Yes	Yes	Yes
Service delivery and State Capacity 1961 × Year FE	No	No	Yes	Yes
Productive capacity and connectivity 1961 × Year FE	No	No	No	Yes
Mean Dep. Variable	-3.13	-3.13	-3.13	-3.13
Mean Indep. Variable	0.125	0.125	0.125	0.125
Observations	4628	4628	4628	4628
Panel B. Islamist Vote Share and Share Pashtuns				
	Islamist Vote Share			
	(1)	(2)	(3)	(4)
Pashtuns' Share 1998 × Post-Musharraf	0.172***	0.176***	0.108***	0.086*
	(0.034)	(0.034)	(0.031)	(0.043)
Pashtuns' Share 1998 ×				
Post-Zia & Pre-Musharraf	0.038	0.040	-0.017	-0.072
	(0.044)	(0.044)	(0.043)	(0.046)
Year and District Fixed Effects	Yes	Yes	Yes	Yes
Balochi Share and Its Interactions	Yes	Yes	Yes	Yes
Controls (time-varying)	No	Yes	Yes	Yes
Service delivery and State Capacity 1961 × Year FE	No	No	Yes	Yes
Productive capacity and connectivity 1961 × Year FE	No	No	No	Yes
Mean Dep. Variable	.059	.059	.059	.059
Mean Indep. Variable	.052	.052	.052	.052
Observations	393	393	393	393

Note: The table reports difference-in-differences estimates of how the Pashtun population share relates to outcomes around Zia's (1977) and Musharraf's (1999) coups relative to the pre-Zia baseline. Panel A uses annual political violence (GTD definition of terrorism) for 1970–2021. Panel B uses the combined vote share of Islamist parties in all national elections from 1970 to 2018. Pashtun and Baloch population shares come from the Pakistan census; Pashtun share is measured in 1998 as the fraction reporting "Pushtu" as mother tongue. Column (1) includes district and year fixed effects and controls for Baloch share and its interactions. Column (2) adds time-varying literacy and urbanization. Column (3) interacts 1961 per-capita education and health facility stocks with year fixed effects. Column (4) adds 1961 wheat productivity (tons per hectare) and 1961 road density (road miles per square mile), each interacted with year fixed effects. Standard errors are clustered at the district level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A10: Robustness to Conley Spatial Correlation Adjustments

	Log of Political Violence Incidents		Islamist Vote Share	
	(1)	(2)	(3)	(4)
Panel A: Radius 100 km				
Pashtuns' Share 1998 × Post-Musharraf	2.815***	2.215***	0.255***	0.147***
	(0.315)	(0.239)	(0.029)	(0.047)
Pashtuns' Share 1998 ×				
Post-Zia & Pre-Musharraf	0.082	-0.430***	0.111***	0.028
	(0.074)	(0.126)	(0.026)	(0.043)
Time-Varying Controls; Balochi Share & Interactions	Yes	Yes	Yes	Yes
Year and District Fixed Effects	No	Yes	No	Yes
Mean Dep. Variable	0.317	0.317	0.206	0.206
Observations	5512	5512	502	502
Panel B: Radius 200 km				
Pashtuns' Share 1998 × Post-Musharraf	2.815***	2.215***	0.255***	0.147***
	(0.382)	(0.317)	(0.029)	(0.057)
Pashtuns' Share 1998 ×				
Post-Zia & Pre-Musharraf	0.082	-0.430***	0.111***	0.028
	(0.090)	(0.144)	(0.028)	(0.054)
Time-Varying Controls; Balochi Share & Interactions	Yes	Yes	Yes	Yes
Year and District Fixed Effects	No	Yes	No	Yes
Mean Dep. Variable	0.317	0.317	0.206	0.206
Observations	5512	5512	502	502
Panel C: Radius 300 km				
Pashtuns' Share 1998 × Post-Musharraf	2.815***	2.215***	0.255***	0.147***
	(0.401)	(0.346)	(0.033)	(0.046)
Pashtuns' Share 1998 ×				
Post-Zia & Pre-Musharraf	0.082	-0.430***	0.111***	0.028
	(0.096)	(0.154)	(0.028)	(0.042)
Time-Varying Controls; Balochi Share & Interactions	Yes	Yes	Yes	Yes
Year and District Fixed Effects	No	Yes	No	Yes
Mean Dep. Variable	0.317	0.317	0.206	0.206
Observations	5512	5512	502	502
Panel D: Radius 400 km				
Pashtuns' Share 1998 × Post-Musharraf	2.815***	2.215***	0.255***	0.147***
	(0.407)	(0.355)	(0.029)	(0.041)
Pashtuns' Share 1998 ×				
Post-Zia & Pre-Musharraf	0.082	-0.430***	0.111***	0.028
	(0.099)	(0.146)	(0.023)	(0.037)
Time-Varying Controls; Balochi Share & Interactions	Yes	Yes	Yes	Yes
Year and District Fixed Effects	No	Yes	No	Yes
Mean Dep. Variable	0.317	0.317	0.206	0.206
Observations	5512	5512	502	502

Notes: The table examines the robustness of the estimated effects of Zia's (1977) and Musharraf's (1999) coups to accounting for Conley (2008) spatial correlation. Columns (1–2) use the log of district-level political violence incidents, and Columns (3–4) use district-level Islamist vote share as the dependent variables. The key explanatory variables are the interactions *Pashtuns' Share 1998 × Post-Musharraf* and *Pashtuns' Share 1998 × Post-Zia Pre-Musharraf*, where *Pashtuns' Share 1998* represents the proportion of individuals in a district reporting "Pushtu" as their mother tongue in the 1998 Pakistan census. Standard errors are clustered at the district level and adjusted for spatial correlation following Conley (2008), assuming that the correlation between the error terms of two districts is zero beyond 100 km and 2000 km in Panels A and B, respectively. $^{*}p < 0.10,^{**}p < 0.05,^{***}p < 0.01$.

Table A11: Robustness of Outcomes' Coefficient Estimates to the Level of Errors Clustering

Panel A. Political Violence			
	Log of Political Violence Incidents		
	(1)	(2)	(3)
Pashtuns' Share 1998 × Post-Musharraf	2.215***	2.157**	2.161*
	(0.324)	(0.706)	(0.816)
Pashtuns' Share 1998 ×			
Post-Zia & Pre-Musharraf	-0.430***	-0.531	-0.534
	(0.153)	(0.389)	(0.406)
Standard Errors Clustering Level	District	Division	Province
Year and District Fixed Effects	Yes	Yes	Yes
Balochi Share and Its Interactions	Yes	Yes	Yes
Time-Varying Controls	Yes	Yes	Yes
Mean Dep. Variable	-3.11	-3.11	-3.11
Observations	5512	5512	5512
Panel B. Islamist Party Votes			
	Islamist Vote Share		
	(1)	(2)	(3)
Pashtuns' Share 1998 × Post-Musharraf	0.147***	0.211**	0.222*
	(0.040)	(0.066)	(0.082)
Pashtuns' Share 1998 ×			
Post-Zia & Pre-Musharraf	0.028	0.084	0.095
	(0.064)	(0.088)	(0.107)
Standard Errors Clustering Level	District	Division	Province
Year and District Fixed Effects	Yes	Yes	Yes
Balochi Share and Its Interactions	Yes	Yes	Yes
Time-Varying Controls	Yes	Yes	Yes
Mean Dep. Variable	0.06	0.06	0.06
Observations	502	502	502

Note: The table presents the effects of Zia's (1977) and Musharraf's (1999) coups on district-level Political Violence and Islamist Party Votes, testing the estimates' robustness to the clustering level. The key explanatory variables in all models are the interactions *Pashtuns' Share 1998 × Post-Musharraf* and *Pashtuns' Share 1998 × Post-Zia Pre-Musharraf*. All regressions include year and district fixed effects, and control for literacy, urbanization, as well as Baloch population share interacted with year fixed effects. Standard errors are clustered at the district level for Column (1), at the division level for Column (2), and at the province level for Column (3). * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A12: Impacts of the 1999 and 1977 Coups on Political Violence, Islamist Party Votes, Female Literacy, and Madrasa Enrollment: Multiple Hypothesis Testing

	Log of Political Violence Incidents	Islamist Vote Share	Female Literacy (Ages 5-9)	Early Age Marriages
	(1)	(2)	(3)	(4)
Share Pashtuns 1998 × Post Mushrraf coup 1999	2.215***	0.147***		
Pashtuns' Share 1998 × Post-Zia & Pre-Musharraf	-0.430***	0.028		
Share Pashtuns 1951 × Post Zia Coup 1977			-0.099***	0.079**
P-values	0.001	0.001	0.001	0.001
Benjamini-Hochberg Q-values	0.001	0.001	0.001	0.003
Romano-Wolf P-values	0.012	0.007	0.149	0.007
Year and District FEs	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes
Mean Dep. Var.	-3.110	0.060	0.248	0.314
Observations	5512	502	311	274

Note: The table presents the effects of the 1999 Musharraf's Coup on Political Violence and Islamist Party Votes and the effects of the 1977 Zia's Coup on Female Literacy and Madrasa Enrollment, incorporating multiple hypothesis testing adjustments. The table reports standard P-values, False Discovery Rate (FDR) Q-values, and Family-Wise Error Rate (FWER) adjusted P-values using the Romano-Wolf stepdown procedure, accounting for multiple hypothesis testing across four null hypotheses. For Columns (1)-(2), the key explanatory variable is the interaction term *Share Pashtuns in 1998 × Post Musharraf coup 1999*; for Columns (3)-(4), the key explanatory variable is the interaction term *Share Pashtuns in 1951 × Post Zia Coup 1977*. In implementing the Romano-Wolf procedure, the districts based on Pakistan's 1951 administrative boundaries (the broadest available) are used as clusters for resampling. In the original regressions, standard errors are clustered at the district level, with the clustering based on the territorial divisions relevant to each dependent variable. The reported level of significance corresponds to the values of the standard P-values: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Appendix C: Data Construction

C.1 District Boundaries Harmonization

This subsection describes the harmonization of district boundaries across census years. Pakistan's administrative district boundaries varied over time, implying that district units are not directly comparable across different census years. We track changes in the territorial division of districts using information from Pakistani population censuses and historical administrative maps. These changes are summarized in the table below.

Table C1: Harmonization of District Boundaries Across Census Years

1961	1972	1981	1998	2017
Kohat	—	—	Kohat Karak Hangu	—
Bannu	—	—	Bannu Lakki Marwat	—
D.I. Khan	—	—	D.I. Khan Tank	—
Peshawar	—	Peshawar Charsadda	Peshawar Charsadda Nowshera	—
Mardan	—	—	Mardan Swabi	—
Hazara	Abbottabad Mansehra	—	Abbottabad Haripur Mansehra	Abbottabad Haripur Mansehra Torghar
Larkana	—	—	Larkana; Kamber Shahdadkot	Larkana; Kamber Shahdadkot

Continued on next page

Table C1 continued

1961	1972	1981	1998	2017
Dadu	—	—	Dadu Jamshoro	—
Jacobabad	—	—	Jacobabad Kashmore	—
Hyderabad	Hyderabad Badin	—	Hyderabad Matiari Tando Allahyar T. M. Khan Badin	—
Nawabshah	—	—	Nawabshah Naushero Feroze	Nawabshah Naushero Feroze Sh. Sikandarabad Sh. Benazirabad
Thatta	—	—	—	Thatta Korangi Karachi Sujawal
Karachi	—	—	Karachi Central Karachi East Karachi South Karachi West Malir	Karachi Central Karachi East Karachi South Karachi West Malir Korangi
Sukkur	—	Sukkur Shikarpur	Sukkur Ghotki Shikarpur	—
Khairpur	—	—	—	—

Continued on next page

Table C1 continued

1961	1972	1981	1998	2017
Tharparkar Sanghar	—	—	Tharparkar Mirpur Khas Umerkot Sanghar	—
Campbellpur (Attock)	—	—	Attock Chakwal	—
Jhelum	—	—	—	—
Lyallpur	Faisalabad	—	Faisalabad T. T. Singh	—
Lahore	Lahore Kasur	—	—	—
Multan	Multan Vehari	—	Multan Lodhran Khanewal Vehari	—
Muzaffargarh	—	—	Muzaffargarh Layyah	—
Shahpur Sargodha	—	—	Sargodha Khushab	—
Bahawalpur Bahawalnagar	—	—	—	—
Rahimyar Khan	—	—	—	—
Gujranwala	—	—	Gujranwala Hafizabad	—
Sheikhupura	—	—	Sheikhupura Nankana Sahib	—

Continued on next page

Table C1 continued

1961	1972	1981	1998	2017
D. G. Khan	—	—	D.G. Khan Rajanpur	—
Sialkot	—	—	Sialkot Narowal	—
Mianwali	—	—	Mianwali Bhakkar	—
Gujrat	—	—	Gujrat Mandi Bahauddin	—
Jhang	—	—	—	Jhang Chiniot
Montgomery	Sahiwal	—	Sahiwal Okara Pakpattan	—
Rawalpindi	Rawalpindi Islamabad	—	—	—
Loralai	—	—	Loralai Duki Barkhan Musakhel	—
Sibi	Sibi Kohlu	Sibi Kohlu Kohlu Ag.	Sibi Harnai Ziarat Jaffarabad Kohlu Dera Bugti	Sibi Harnai Ziarat Jaffarabad Sohbatpur Kohlu Dera Bugti

Continued on next page

Table C1 continued

1961	1972	1981	1998	2017
Kalat	Kalat Kachhi Khuzdar Nasirabad	Kalat Bolan Khuzdar Nasirabad	Kalat Bolan Mastung Khuzdar Awaran Jhal Magsi Nasirabad	Kalat Bolan Mastung Khuzdar Awaran Jhal Magsi Nasirabad Surab Lehri
Mekran	—	Turbat Panjgur Gwadar	Kech Panjgur Gwadar	—
Kharan	—	—	Kharan Washuk	—
Lasbela	—	—	—	—
Chagai	—	—	Chagai Nushki	—
Quetta–Pishin	Quetta Pishin	—	Quetta Pishin Killa Abdullah	—
Zhob	—	—	Zhob Sherani Killa Saifullah	—
N.Waziristan	—	N. Waziristan N. Waziristan Ag.	—	—

Continued on next page

Table C1 continued

1961	1972	1981	1998	2017
S. Waziristan FR Bannu FR D. I. Khan	—	S. Waziristan FR Bannu FR D. I. Khan S. W. Ag.	S. Waziristan FR Bannu FR D. I. Khan S. W. Ag. FR Lakki Marwat FR Tank	—
Kurram Ag.	—	—	—	—
Khyber Ag. FR Peshawar FR Kohat Mohmand Ag. Malakand P.A.	Khyber Ag. FR Peshawar FR Kohat Mohmand Ag. Malakand P.A. Orakzai Ag.	—	—	—
Malakand Ag. Swat FR Hazara Chitral Dir	Bajaur Ag. Swat Kohistan Chitral Dir	Bajaur Ag. Swat Kohistan Chitral Dir Battagram	Bajaur Ag. Swat Kohistan Chitral Upper Dir Lower Dir Shangla	—

Notes: This table summarizes the evolution of Pakistan's district-level territorial divisions across census years used in the analysis (1961, 1972, 1981, 1998, and 2017). Each row corresponds to a district as defined in the 1951 census; the original 1951 district name appears in bold in the first column. Entries in subsequent columns report the administrative units corresponding to that original district in the indicated census year, including alternative names and successor districts created through subdivision. Multiple entries within a cell indicate that the original district was split into multiple districts. A dash ("–") in a district's row for a given year indicates that no territorial changes occurred in that year. No district mergers are observed.

Over the time period covered by our analysis, territorial changes in Pakistan's districts take a limited and well-defined form. In particular, districts either remained unchanged or were subdivided into smaller administrative units; we do not observe cases in which districts were merged. As a result, boundary changes are characterized by a monotonic increase in the number of districts over time.

To construct a consistent panel, we harmonize all district-level observations to a common set of district boundaries. Specifically, when a historical district was subsequently subdivided, we map the earlier observations to the corresponding set of successor districts. This approach allows us to retain all available information while ensuring comparability of district-level variables across time.

C.2 Pakistan District Census Reports Data

This subsection describes how we construct district-level variables, drawing on the Pakistan District Census Reports. We compile a comprehensive set of measures capturing demographic composition, socio-economic conditions, educational outcomes, and religious literacy at the district level. Specifically, we describe the construction of variables for ethnic composition (shares of Pashtun and Balochi populations), time-varying controls such as literacy and urbanization rates, baseline socio-economic characteristics in 1961 and 1972, female literacy and early-age marriage, and the share of Quran readers among literate individuals. For each variable, we explain the data sources, the treatment of missing observations, and the procedures used to harmonize district boundaries over time, ensuring comparability across censuses and allowing for the construction of consistent district-level panels.

Pashtuns and Balochi People. Using all available district-level census reports, we compile data on total population and the number of individuals reporting their mother tongue. The share of Pashtuns people is defined as the fraction of individuals reporting "Pushtu" as their mother tongue relative to the total district population. In our regressions, this measure enters as part of the main explanatory variable and is interacted with post-treatment time indicators to capture differential effects across districts with varying Pashtun shares. The share of Balochi people is constructed analogously.

Figure C1: Fragment of Raw Data from District Census Report

SEX	POPULATION BY MOTHER TONGUE							
	TOTAL	URDU	PUNJABI	SINDHI	PUSHTO	BALOCHI	SARAIKI	OTHERS
1	2	3	4	5	6	7	8	9
			LAKKI MARWAT DISTRICT					
BOTH SEXES	490,025	1,107	1,215	51	486,620	36	951	45
MALE	250,336	558	639	24	248,586	15	487	27
FEMALE	239,689	549	576	27	238,034	21	464	18
			LAKKI MARWAT DISTRICT - RURAL					
BOTH SEXES	443,147	822	439	36	441,685	31	117	17
MALE	225,925	425	241	17	225,158	14	60	10
FEMALE	217,222	397	198	19	216,527	17	57	7

Time-varying controls. The time-varying controls we use in all regressions and robustness checks are literacy rate and urbanization rate. We compile district-level data from all available population censuses conducted in Pakistan in 1951, 1961, 1972, 1981, 1998, and 2017. Using these census reports, we construct a panel dataset measuring the share of the literate population and the share of the population residing in urban areas for each district.

For literacy, we compute the literacy rate in each district-year by dividing the total number of literate individuals in the district-year by the corresponding total district-year population. For urbanization, we measure the urbanization rate as the fraction of the district-year population classified as urban in the corresponding district-year census reports. We digitize all available district-level information from the original census volumes and harmonize variable definitions across census years to ensure consistency over time.

Because Pakistan's administrative boundaries changed over time, district definitions are not directly comparable across censuses. To construct a consistent panel, we harmonize district boundaries by mapping all observations to a common set of district units following the procedure described in Section C1. Finally, because census data are only available at discrete points in time, we linearly interpolate the literacy and urbanization rates to fill in missing values for intercensal years. This procedure yields a balanced district-level panel of time-varying controls covering the full sample period used in the analysis.

Baseline characteristics 1961 and 1972. We construct baseline measures of district-level socio-economic conditions using the Pakistan District Census Reports for 1972 and 1961, capturing the state of districts prior to the military regimes of Generals Zia and Musharraf.

For 1972, we collect per-capita educational facilities, per-capita health facilities, wheat productivity, and road density. Per-capita educational facilities are computed as the sum of Universities, Colleges, High Schools, Middle Schools, and Primary Schools in a district divided by its population. Per-capita health facilities are calculated analogously, summing Hospitals and Dispensaries and dividing by the district population. Wheat productivity is measured as the ratio of wheat production (in tons) to the area under wheat cultivation (in acres), with acres converted to square miles. Road density is defined as the total mileage of Shingled, Metalled, and Unmetalled Roads divided by the district area in square miles.

For 1961, we construct analogous measures of per-capita educational facilities, including Universities, Colleges, High Schools, Middle Schools, Primary Schools, and Special Schools, per-capita health facilities, covering Civil and Other Hospitals as well as Civil and Other Dispensaries, and road density, defined as the ratio of metalled and unmetalled road miles to district area. District-level wheat production is not available for 1961; only the area under wheat cultivation in 1961 is reported, and the data are incomplete. For districts with missing information, we supplement with figures from 1959–1960. Wheat productivity is

then calculated as the share of the district's area devoted to wheat relative to its total area.

Remaining missing values are imputed using the median of the corresponding variable across districts within the same province.

Female Literacy (ages 5–9). Female literacy is measured as the fraction of girls aged 5–9 attending school in a given district, normalized by the total number of girls in the same age group. We compile district-level data from the Pakistani censuses of 1951, 1961, 1981, 1998, 2017, and 2023. Changes in district boundaries over time are tracked using census records and historical maps to ensure consistency across years.

Female Early-Age Marriages. We measure female early-age marriage as the share of girls who are married, widowed, separated, or divorced within a given age group, relative to the total female population in that group. Early marriage is defined as marriage occurring before the age of 19. District-level data are drawn from the Pakistani censuses of 1951, 1961, 1981, 1998, 2017, and 2023. The age categories in which early marriages are observed vary across censuses: in 1951, 10–19; in 1961, 10–14 and 15–19; in 1972, 10–14 and 15–19; and in all subsequent censuses, 15–19 only. For consistency, we use ages 15–19 available for most censuses and 10–19 for 1951. All data are harmonized to ensure comparability across districts and over time.

Figure C2: Fragment of Digitized Census Report Data on Early-Age Marriages

year	Province	District	Age Group	Total				
				Female Total	Female Never Married	Female Married	Female Widowed	Female Divorced
1981	NWFP	Malakand	15 - 19	11224	6948	4243	27	6
1981		Abbottabad	15 - 19	49819	36382	13258	73	186
1981		Bannu	15 - 19	28400	20228	8040	96	36
1981		Chitral	15 - 19	8174	3681	4423	19	51
1981		D.I.Khan	15 - 19	25868	16640	9132	53	43
1981		Dir	15 - 19	28401	16140	12169	78	14
1981		Kohat	15 - 19	33348	19805	13432	64	47
1981		Kohistan	15 - 19	12508	9050	3354	74	30
1981		Mansehra	15 - 19	42643	32587	9911	65	80
1981		Mardan	15 - 19	63417	45562	17715	98	42
1981		Peshawar	15 - 19	96255	70200	25850	160	45
1981		Swat	15 - 19	47867	24028	23715	106	18

Quran Readers. We measure the share of Quran readers among literate individuals in each district. This measure is constructed to build a consistent panel despite incomplete data across censuses. In 1951, it is based on the number of individuals reported as able to read the Holy Quran. In 1961, we supplement missing data by including individuals who can read Arabic but are not reported as able to speak or write it. In 1981, the measure includes individuals who can read or are learning to read the Quran, and in 1998, it includes all individuals reported as able to read the Quran. For all years, counts of Quran readers

are first collected in absolute terms, along with the total number of literate individuals in each district. These counts are then aggregated to the earliest territorial boundaries used in our study (1951), after which the share of Quran readers is calculated as the ratio of Quran readers to all literate individuals.

C.3 Political Violence Data

We use data from the Global Terrorism Database (GTD), which provides geocoded information on terrorist events. To align these events with historical district boundaries, we intersect the geocoded locations of each event with historical district polygons using a shapefile and QGIS software. This procedure allows us to assign each terrorist incident to the corresponding district at the time of the event, enabling district-level analysis of political violence.

C.4 Free and Fair Election Network Data

We use data on Provincial Assembly elections for the years 1970, 1977, 1985, 1988, 1990, 1993, 1997, 2002, 2008, 2013, and 2018 from the Free and Fair Election Network (FAFEN, `https://fafen.org`). For each election, the dataset includes information on contesting candidates, their party affiliation, actual votes received, and constituency-level data: actual valid votes, rejected votes, total polled votes, and registered voters.

Figure C3: Fragment of Digitized Election Data

Year	PA Constituency	Contesting Candidates	Full Name of Party	Actual Candidate Vote
2018	PP-20 Chakwal-I	Sultan Haider Ali Khan	Pakistan Muslim League (Nawaz)	75934
2018	PP-20 Chakwal-I	Tariq Mehmood Afzal	Pakistan Tehreek-e-Insaf	46025
2018	PP-20 Chakwal-I	Chaudhary Nasir Abbas	Tehreek-e-Labbaik Pakistan	16576
2018	PP-20 Chakwal-I	Muhammad Tufail	Independents	610
2018	PP-20 Chakwal-I	Imran Qaisar Abbas	Awami National Party	163
2018	PP-30 Sargodha-Iii	Yasir Zafar Sindhu	Independents	43113
2018	PP-30 Sargodha-Iii	Sajid Mehmood	Pakistan Tehreek-e-Insaf	23397
2018	PP-30 Sargodha-Iii	Asim Iqbal	Independents	290
2018	PP-30 Sargodha-Iii	Rao Waqas Ahmed	Independents	239
2018	PS-7 Ghotki-Iii	Abdul Bari Patafi	Pakistan Peoples Party Parliamentarians	48390
2018	PS-7 Ghotki-Iii	Mian Abdul Malik	Pakistan Muslim League (Functional)	37228
2018	PS-7 Ghotki-Iii	Zulfiqar Ali Shah	Independents	1119
2018	PS-7 Ghotki-Iii	Shamas-Ud-Din	Independents	390
2018	PS-7 Ghotki-Iii	Abdul Rab Patafi	Independents	174
2018	PS-7 Ghotki-Iii	Adam Ali Sher	Independents	56
2018	PS-7 Ghotki-Iii	Asad Tariq	Independents	33

Since each district can contain multiple constituencies, we aggregate these measures from the constituency level to the district level. Using these data, we construct three district-level variables. **Turnout Rate** is the sum of total polled votes across all constituencies in a district, divided by the district population in the corresponding year. **Registered Voters**

Share is the sum of registered voters across all constituencies in a district, divided by the district population. **Islamist Votes Share** is the share of votes in a district going to parties or candidates classified as Islamist. Party affiliation is determined based on whether a party (or candidate, if party information is missing) follows a conservative religious platform. For the 1977 and 1985 elections, party affiliation is not always available. In these cases, we use honorifics in candidate names (e.g., "Molana", "Molvi", "Haji", "Hafiz", "Qazi", "Qari", "Mufti", "Mian", "Khani", "Moulana", "Hazrat", "Hajid", "Al Haj Molana") as a proxy for religious orientation. The following table lists parties classified as Islamist for our analysis:

Table C2: Islamist Parties Used to Construct Islamist Vote Share

Party Name	**Description**
Aalay Kalam Ullah Farman Rasool (saw)	Religious, less conservative
Allah-o-Akbar Tehreek	Ultra-conservative, religious
Islami Inqalab Party	Ultra-conservative, Islamist
Islami Tehreek Pakistan	Ultra-conservative, Shia religious party
Jamaat Ahl-e-Sunnat	Religious, conservative
Jamaat Ahl-e-Sunnat Pakistan	Religious, conservative
Jamaat-e-Islami	Religious, conservative
Jamaat-e-Islami Pakistan	Religious, conservative
Jamait Ahle-Hadith Pakistan (Elahi Zaheer)	Religious, less conservative
Jamat Alaye Kalam Ullah Furman-e-Rasool	Religious, less conservative
Jamiat Mashaikh Pakistan (Pir Fazle Haq)	Religious, conservative
Jamiat Ulama-e-Islam (S)	Ultra-conservative, Islamist
Jamiat Ulama-e-Islam (Sami)	Religious, conservative, Deobandi
Jamiat Ulama-e-Islam Nazryati Pakistan	Ultra-conservative, Deobandi faction
Jamiat Ulema-e-Islam (D)	Religious, conservative
Jamiat Ulema-e-Islam (Fazl-ur-Rahman Group)	Ultra-conservative, Islamist
Jamiat Ulama-e-Islam (Hazarvi)	Religious, conservative
Jamiat Ulama-e-Islam (West Pakistan)	Religious, conservative
Jamiat Ulma-e-Pakistan (Noorani)	Conservative, Sunni religious faction
Jamiat Ulma-e-Pakistan (Niazi)	Conservative, Sunni religious faction
Jamiat Ulma-e-Pakistan (Noorani)	Conservative, Sunni religious faction
Jamiat-e-Ahle-Hadees Pakistan	Religious, conservative
Jamiat-e-Ulema-e-Pakistan	Religious, conservative
JamiatUlema-e-pakistan (Nifaz-e-Shariat)	Ultra-conservative, Islamist party

Continued on next page

Table C2 (continued)

Party Name	Description
Majlis-e-Wahdat-e-Muslimeen Pakistan	Shia religious party, conservative
Markazi Jamat-al-Hadais	Ultra-conservative, Salafi-oriented party
Markazi Jamiat Ahl-e-Hadith Pakistan	Ultra-conservative, Salafi-oriented party
Markazi Jamiat Al- Hadith (Sajid Mir)	Religious, conservative
Markazi Jamiat Mushaikh Pakistan	Religious, Sufi-oriented
Markazi Jamiat Ulema-e-Pakistan (FK)	Sunni religious faction
Markazi Jamiat-e-Ahle-Hadees Pakistan	Religious, conservative
Muslim Ittehad Pakistan	Religious, conservative
Muslim Welfare Movement	Religious, conservative
Mutahida Deeni Mahaz	Islamist alliance of ultra-conservative parties
MUTAHIDA DEENI MAHAZ	Ultra-conservative, Islamist alliance
Mutahidda Ulema Mashaikh Council of Pakistan	Religious council, less conservative
Muttahidda Majlis-e-Amal Pakistan	Islamist alliance of ultra-conservative parties
Mutthida Majlis-e-Amal Pakistan (MMA)	Religious, conservative
Nizam-e-Mustafa Party	Ultra-conservative, Islamist party
Pak Muslim Alliance	Religious, conservative
Pakistan Awami Tehrik	Conservative, Islamist political movement
Pakistan Islami Justice Party	Conservative, religious
Pakistan Islamic Front	Religious, conservative
Pakistan Islamic Republican Party	Ultra-conservative, Islamist
Pakistan Muhammadi Party	Religious, less conservative
Pakistan Rah-e-Haq Party	Ultra-conservative, linked to banned outfits
Pakistan Shia Political Party	Shia religious party
Pakistan Sunni Tehreek	Sunni religious party
Sunni Ittehad Council	Sunni religious alliance
Sunni Tehreek	Sunni religious party
Tehreek Hussainia Pakistan	Shia religious party
Tehreek-e-Difa-e-Pakistan	Ultra-conservative, defense-focused alliance
Tehreek-e-Islam Pakistan	Religious, conservative
Tehreek-e-Labbaik Islam	Ultra-conservative, Barelvi Islamist
Tehreek-e-Labbaik Pakistan	Ultra-conservative, Barelvi Islamist
Tehreek-e-Nafaz-e-Fiqah-e-Jafaria	Shia religious party

Eventually, **Islamist Vote Share** is calculated by summing the votes received by parties

and candidates classified as religious in each district and dividing by the total votes cast for all candidates in that district.

Data on **Attitudes Toward Out-Groups** are drawn from surveys conducted by the Free and Fair Election Network (FAFEN) in 2016. To measure attitudes toward different minority groups, we rely on respondents' answers to questions capturing their general perceptions of: (i) people belonging to the third gender (General perception about People Belong to Third gender), (ii) migrants coming from other countries (General perception about Migrants Coming from other Country), (iii) people who speak a language different from that of the majority (General perception about People Speak different Language than Majority), and (iv) people belonging to another sect (General perception about People that Belongs to other Sect). In the Pakistani context, the term sect commonly refers to different denominations within Islam.

Figure C4: Fragment of Digitized Data on Attitudes Toward Out-Groups

Region	District	General perception about People Belong to Third gender	General perception about Migrants Coming from other Country	General perception about People Speak different Language than Majority	General perception about People that Belongs to other Sect
FATA	Bajaur Agency	Nothing	Positive	Positive	Positive
FATA	Bajaur Agency	Nothing	Nothing	Positive	Positive
FATA	Bajaur Agency	Negative	Positive	Positive	Negative
FATA	Bajaur Agency	Nothing	Positive	Positive	Negative
FATA	Bajaur Agency	Negative	Nothing	Positive	Negative
FATA	Bajaur Agency	Positive	Don't Know	Positive	Negative
FATA	Bajaur Agency	Nothing	Positive	Positive	Positive
FATA	Bajaur Agency	Nothing	Nothing	Nothing	Nothing
FATA	Bajaur Agency	Positive	Positive	Positive	Positive
FATA	Bajaur Agency	Nothing	Nothing	Positive	Negative
FATA	Khyber Agency	Positive	Positive	Positive	Positive
FATA	Khyber Agency	Nothing	Positive	Positive	Negative
FATA	Khyber Agency	Nothing	Positive	Positive	Negative
FATA	Khyber Agency	Nothing	Nothing	Nothing	Nothing
FATA	Khyber Agency	Nothing	Positive	Positive	Nothing
FATA	Khyber Agency	Nothing	Positive	Positive	Positive
FATA	Khyber Agency	Nothing	Positive	Positive	Negative
FATA	Khyber Agency	Nothing	Positive	Positive	Positive
FATA	Khyber Agency	Nothing	Positive	Positive	Nothing
FATA	Khyber Agency	Nothing	Positive	Positive	Positive

For each question, respondents could choose one of four options: Negative, Positive, Nothing, or Don't know. Our main outcome measure is the share of respondents expressing a negative perception, defined as the fraction of respondents selecting Negative among all respondents who answered the question.

C.5 Pakistan Integrated Household Survey's Individual Data

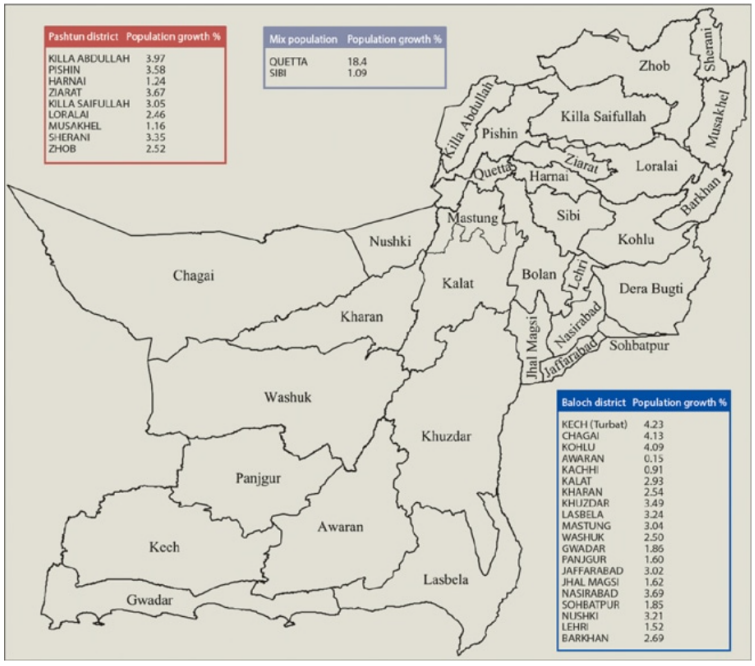
We use individual-level data from the Pakistan Integrated Household Survey (PIHS), harmonized via IPUMS, covering the waves 1991, 2007, 2011, 2013, and 2019. Survey waves

corresponded to different territorial divisions, so we harmonized all observations to the 1981 administrative boundaries following the procedure described in Section C1. Based on these data, we construct several individual-level variables for our analysis:

Ethnicity. We limit our analysis to the waves listed above because only they contain publicly available information on the language in which the interview was conducted (Section "Survey Information", question "In what language was the interview conducted?"). This allows us to construct an individual-level ethnicity variable taking values Baluchi, Punjabi, Pashto, Sindhi, Urdu, and Other.

Pashtun Majority Region. This indicator equals 1 for individuals residing in regions predominantly inhabited by Pashtuns, including the provinces NWFP, FATA, and the northwestern districts of Balochistan.

Figure C5: Northwestern Districts of Balochistan



Madrasa-Aged Exposure Binary Indicator. Using respondents' ages at the time of the survey, we identify the years in which an individual was of school age (5–16 years) and construct a binary variable equal to 1 if the individual was aged 5–16 during the rule of General Zia (1977–1988). Age is also used as a standalone control variable Age. To remove likely misreporting, we drop respondents born before 1932 (those aged 60 or older in 1991) and after 2010 (too young to attend school).

Gender. We create a binary variable Female equal to 1 for female respondents, based

Figure C6: Excerpt from the Individual Questionnaire's Table Showing Personal Information.

Table 6. Dictionary of Variables

RECORD 5: SECTION 1, PART A: HH INFORMATION - 1

HH#: SECTION 1, PART A: HH INFORMATION		ID CODE:
2 SEX:	_	°°°°°°°
3 RELATIONSHIP WITH HEAD:	_	°°°°°°°°°°°°°°°°°°°°°°°°°
4 AGE IN YEARS:	__	
5 MARITAL STATUS:	_	°°°°°°°°°°°°°°°
6 SPOUSE LIVE AT HOME?:	_	°°°°
7 ID CODE OF SPOUSE:	__	
8 TIME AWAY IN MONTHS:	__	
9 MEMBER OR NOT?:		°°°

on self-reported gender in the survey questionnaires.

Religious School Attendance. Using questions in the Education sections of the Individual-level surveys, we identify whether respondents ever attended school. The sample is restricted to individuals who have received some education. For those who reported attending a religious school (for some waves, "Deeni Madrassa") in Section "Present Enrollment" ("What type of school do you attend?") or Section "Past Enrollment" ("What type of school did you last attend?"), we assign a value of 1 to the binary variable Religious School. This variable is the main dependent variable in our individual-level analysis, capturing the probability of attending a religious school.

Rural Residence. PIHS provides information on the district of residence and whether it is classified as urban or rural.

Figure C7: Example of Household Identifier

Table 10. Household identification code

1	2	3	4	5	6	7	8	9
PROVINCE	SUB-UNIVERSE	STRATUM		PRIMARY SAMPLING UNIT			HOUSEHOLD	

For some survey waves, this information is directly available at the household level in the questionnaire. For other waves, rural/urban status is encoded in the household identification code. For example, in the 1991 wave, in the case of SUB-UNIVERSE, possible values are 1

and 2, indicating Urban and Rural areas, respectively. Using the household identifier unique to each survey wave, we assign a Rural indicator equal to 1 for individuals residing in rural areas.