



BEYOND MADRASAS

ASSESSING THE LINKS BETWEEN EDUCATION AND MILITANCY IN PAKISTAN

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OVERVIEW

ncreasing educational attainment is likely to reduce conflict risk, especially in countries like Pakistan that have very low levels of primary and secondary school enrollment. Education quality, relevance and content also have a role to play in mitigating violence. Education reform must therefore be a higher priority for all stakeholders interested in a more peaceful and stable Pakistan. Debate within the country about education reform should not be left only to education policymakers and experts, but ought to figure front and center in national dialogues about how to foster security. The price of ignoring Pakistan's education challenges is simply too great in a country where half the population is under the age of 17.

There has been much debate concerning the roots of militancy in Pakistan, and multiple factors clearly come into play. One risk factor that has attracted much attention both inside Pakistan and abroad is the dismal state of the national education sector. Despite recent progress, current school attainment and literacy levels remain strikingly low, as does education spending. The Pakistani education sector, like much of the country's public infrastructure, has been in decline over recent decades. The question of how limited access to quality education may contribute to militancy in Pakistan is more salient now than ever, given the rising national and international security implications of continued violence.

The second half of 2009 witnessed not only the Pakistani government stepping up action against insurgents but also the release of a new Pakistan National Education Policy that aspires to far-reaching and important reforms, including a commitment to increase investment in education-from 2 to 7 percent of gross domestic product. Hundreds of millions of dollars in international education aid have been newly pledged by donor countries. This renewed emphasis on education represents a substantial opportunity to seek to improve security in Pakistan and potentially also globally over the medium to long term. Policymakers both inside and outside Pakistan should give careful consideration to whether and how education investments can promote peace and stability, taking into account what we now know about the state of the education sector and the roots of militancy.

This report takes a fresh look at the connection between schools, including but not limited to Pakistan's religious seminaries, known as "madrasas," and the rising militancy across the country. Poor school performance across Pakistan would seem an obvious area of inquiry as a risk factor for conflict. Yet to date, the focus has been almost exclusively on madrasas and their role in the mounting violence.¹ Outside Pakistan, relatively little attention has been given to whether and how the education sector as a whole may be fueling violence, over and above the role of the minority of militant madrasas.²

The analysis builds on the latest, cutting-edge research on the education sector in Pakistan, as well as on risk factors for conflict and militant recruitment and support. Madrasas are not nearly as prominent on Pakistan's educational landscape as previously thought, and due to their small numbers and conflicting data on militant recruitment, cannot be considered the primary source of militancy across the country. The report highlights robust international evidence that low enrollment rates, including primary and secondary, are a risk factor for violence. While we lack in-country empirical data on education and militancy, this research suggests that the potential to mitigate the risk of continued militancy in Pakistan through investments in education aimed at expanding access is real. Scholars of conflict agree that education is one of the few areas in which development policy can mitigate violence.

The report examines the implications of 9 key findings:

- 1. Demand for education within Pakistan far exceeds the government's ability to provide it.
- 2. Contrary to popular belief, madrasas have not risen to fill the gap in public education supply and have

not been one of the primary causes of the recent rise in militancy.

- Beyond madrasas, the education supply gap in and of itself likely increases the risk of conflict in lowincome countries like Pakistan, highlighting the importance of expanding educational access.
- 4. A nuanced analysis of the mechanisms whereby education may exacerbate conflict risk suggests that in addition to access, education quality and content are important for promoting stability.
- 5. Poor education-sector governance creates huge discrepancies in the public education system, inflaming citizens' grievances against the government.
- Poor learning outcomes are equated with a lack of skills, including good citizenship skills, which can help mitigate extremism.
- The curriculum and teaching in government schools help create intolerant worldviews among students.
- 8. Schools do little to prepare students for the labor market, frustrating young achievers and increasing the pool of possible militant recruits.
- Education provision is highly inequitable, exacerbating grievances among those left out of the system.

The report systematically explores these key findings, provides an objective synthesis of the available evidence on education and militancy, and highlights the mechanisms through which education appears to contribute to various forms of militancy in Pakistan. It also represents a call to action, underscoring the power of education reform as a means of supporting security and stability in Pakistan. It identifies priority areas that can serve as a guide to policy interventions in the education sector, and seeks to promote dialogue within Pakistan about how to best harness the power of education for stability and peace. With a curriculum that glorifies violence in the name of Islam and ignores basic history, science and math, the public education system [in Pakistan] has become a major barrier to U.S. efforts to defeat extremist groups.

-Washington Post, January 17, 2010

INTRODUCTION

his report examines whether and how Pakistan's education system, including but not limited to its madrasas, may be contributing to militancy. The rationale for the report is twofold. First, from a policy perspective, given the large donor investments in Pakistan's education sector, it is troubling that relatively little attention has been given to how education may be fueling militancy, over and above the role of militant madrasas. At the very least, given the prioritization of education investments among donor countries, special emphasis should be placed on using empirical data to guide policy strategy and inform education programming, especially with an eye to reforms that will help mitigate militancy. Second, from an analytic perspective, recent empirical data on Pakistan's educational landscape and on the backgrounds of Pakistani militants do not support the notion that madrasas are the central factor in Pakistani militancy. At the same time, cross-country data on education and conflict increasingly show a correlation between school attainment and conflict. On both grounds, a reassessment of the role of Pakistan's education system as a whole is warranted and timely.

The Pakistani education sector, like much of the country's public infrastructure, has been in decline during the last few decades. Despite recent progress, current school attainment and literacy levels remain extremely low. Poor school performance across Pakistan would therefore seem an obvious area of inquiry as a risk factor for conflict. Yet to date, the focus has been almost exclusively on Pakistan's madrasas and their role in the mounting violence.³ Outside Pakistan, relatively little attention has been given to whether and how the education sector as a whole may be fueling violence, over and above the role of the minority of militant madrasas.⁴ Among those who do see a role for the education sector writ large, the linkages to militant violence tend to be assumed rather than demonstrated.

This analysis draws on an emerging body of global data showing a robust link between education and civil conflict; on average, the lower a country's primary and male secondary enrollment rates, the higher the risk that conflict will erupt. Our analysis also builds on a still-limited but growing body of empirical evidence on the Pakistani education system and on the roots of Pakistani militancy.

An important contribution of the report is its reliance on fact-based evidence drawn from the field in Pakistan. Though there remain significant data gaps, particularly as concerns the background of militants and the causes of their radicalization, this report is grounded in the latest cutting-edge research. It relies on numerous surveys, providing a window into the views of ordinary Pakistanis. It also calls attention to a tradition of research in Pakistan on the radicalization of schools. The analysis includes interviews of prominent Pakistanis based inside and outside the country.

The overarching conclusion that emerges from the analysis is that, although hard data on education and its links with militancy in Pakistan are limited, a thorough review of the evidence indicates that the education sector and low attainment rates most likely do enhance the risk of support for and direct involvement in militancy. Because education is a factor in militancy and is one of the few areas in which policy can have an impact on violence, policymakers should prioritize education reform as part of a strategy for promoting security and stability. This finding has important policy implications, which are discussed in the report's conclusion and highlight the types of education reforms that promise to help mitigate violence.

In addition to providing strong evidence that poor education is a risk factor for militant violence in Pakistan, this analysis helps to disentangle the reasons why education and militancy may be linked, either because poor education creates widespread grievances, negative worldviews and opportunities for militants to recruit or because schools fail to impart critical citizenship skills. The analysis suggests that although a small number of madrasas are a major security concern, poor public schooling likely fosters communities of support for militancy among Pakistanis. Thus, the report seeks both to provide a clear-eyed synthesis of the available evidence on education and militancy and also to highlight the mechanisms through which the education system may contribute to various forms of militancy and conversely, if reformed, could help mitigate violence.

Given the complexity and sensitivity of the topic, we should be explicit about what this report does and does not seek to achieve. First, though education does bear on militancy, lack of education and of literacy are by no means the main or only causes of militancy in Pakistan. Second, education reform can be an important complement to other, short-term counterinsurgency measures. If ignored, counterinsurgency objectives may be difficult to achieve. However, education interventions are not necessarily the best or only means of countering militancy. Third, this report offers insights into the relationship between education and militancy that can be used as an organizing framework to guide specific policies and education interventions. The analysis does not, however, assess the impact of particular interventions or programs on the security situation in Pakistan. Fourth, the main contribution of the report is to offer a thorough assessment of the sometimes-conflicting evidence on education and militancy in Pakistan, using interviews with experts and officials to inform a discussion of the implications of this research for policy. The report is not based on new fieldwork or survey data. One of the main conclusions of this analysis is that the available data on the determinants of militancy in Pakistan, particularly as pertains to the education sector, are limited and in many cases of guestionable guality, and urgently need to be supplemented in order to adequately inform policy.

Structure of the report

The rest of this report is divided into several sections. It begins with a review of the debate over the role of madrasas in fueling militancy, and it situates madrasas in the context of the broader Pakistani education sector. A review of the most recently available data suggests that the real story is not about the rise of madrasas, which constitute only a small fraction of available schooling options, but about the recent explosion of small private schools in many, though not all, parts of Pakistan. The report then asks whether, beyond the limited role of madrasas in exacerbating militant violence, we have any reason to believe that education more generally plays a role. In a section on the causes of conflict and organized militant violence globally, the report shows why the answer to this question is yes, and why Pakistan's education system is particularly vulnerable. Having outlined the education-related risk factors for conflict, the report then

contextualizes these in Pakistan, outlining a set of mechanisms that may explain why the education sector increases the risk of support for or engagement in militant violence. The last two sections synthesize these insights and assess the implications for policy, ultimately concluding that the right set of interventions in the education sector could play a significant role in mitigating militancy and promoting security in Pakistan.

SECURITY VERSUS DEVELOP-MENT: STRIKING A MIDDLE GROUND

his report seeks to strike a middle ground between the view common in some development circles that economic assistance should never be used as a means of achieving security objectives and the view of those who see development aid merely as one tool in an arsenal of measures designed to help 'win hearts and minds' in the short term. There should be a wider recognition that international security and the national security of states hinge to some extent on the human security of citizens in the developing world whose lives are often threatened by poverty, lack of development and conflict.⁵ This report does not view reform of the education sector in Pakistan as entirely distinct from long-term counterinsurgency goals, yet neither does it suggest that tactical education interventions such as the secularization of schools be seen as antidotes to militancy.6

Instead, the analysis proceeds from the premise that both national security policy and development investments in education too often neglect the possibility that education can either fuel or mitigate militancy. Security experts frequently overlook education as a potential source of support for militancy; or if they do address it, they often miss important nuances in education policy. In Pakistan, there are potentially numerous connections between the education system and the mounting occurrence of militancy, and these have been largely overlooked by security experts whose main focus has been the role of madrasas. Though some madrasas clearly do have an impact on the political and security climate, their role is limited.

At the same time, development experts often discuss education as if it were merely a neutral or technical

process, failing to discern the ways in which education itself is used by state or nonstate actors to shape social and political agendas. Education specialists in particular too often debate enrollment rates, learning outcomes, and teacher management, while neglecting the political and economic implications of education policy. Viewing education through a politically neutral lens, they can fail to recognize how education is once shaped by its broader social context and in turn shapes the norms of society. Indeed, to fully understand education processes and systems, we must move beyond seeing education as merely a technical process of information dissemination and skills development to seeing how it is and has been employed in shaping social and political agendas, including identity formation and nation building.

Our position is that although education reform is important in its own right and should not be conflated with counterinsurgency objectives, the objective should be conflict-sensitive education investments. At a minimum, conflict-sensitive education programming would do no harm, ensuring that investments are not exacerbating the root causes of militancy. At most, education reform could help, along with other policies, to mitigate the risk factors associated with militancy and advance peace-building objectives.⁷

As numerous scholars of conflict have observed, governments do have some leverage over conflict risk through their investments and reform of the education sector.⁸ In fact, education reform is one of the few policy areas where policy and program interventions can hope to mitigate the risk of further militancy and promote security. Interventions in the education sector therefore represent a substantial opportunity and deserve far more nuanced consideration in Pakistan.

THE MANY FACETS OF PAKISTANI MILITANCY

utbreaks of militant violence have become an all too familiar reality in Pakistan, affecting the safety and well-being of people and states far beyond the country's borders. Its domestic strife ranks among the deadliest in the world, rivaling the devastating conflicts that have roiled Sudan and Irag.⁹ The level of violence has a dramatic impact on the daily lives of Pakistanis, particularly those living in the most insecure parts of the country. Suicide bombings are a daily occurrence. According to the U.S.-based National Counterterrorism Center, there were 8,614 casualties in Pakistan in 2009, 6,041 of which were civilian-1,793 deaths and 4,248 injuries-while there were 4,232 in Afghanistan that year. Pakistan's tribal belt along its border with Afghanistan has witnessed the lion's share of the violence, with 1,322 of its 1,915 terrorist attacks in 2009 occurring in the Federally Administered Tribal Area (FATA) and Khyber-Pakhtoonkwha (formerly NWFP, see figure 1).¹⁰ Not surprisingly, violence and extremism now rank as the top concern of Pakistanis; 9 out of 10 see crime and terrorism as the most serious challenge facing their country, and 79 percent are concerned about the rise of Islamic extremism. In Khyber-Pakhtoonkhwa, three-quarters worry that extremist groups could take over the country.¹¹

Not only has the overall level of violence in Pakistan increased, but militant groups have also multiplied and developed complex relationships with each other. Among the militant groups involved in the violence both within Pakistan and beyond its borders is Al Qaeda, which over the past decade has resurrected its capacity to strike the United States from a safe haven in the FATA.¹² Despite losing a substantial portion of its core leadership in Pakistan to attacks and arrests, Al Qaeda retains the capability to orchestrate an attack in the U.S.¹³ Beyond Al Qaeda, a large number of militant factions with wide-ranging capabilities and objectives also operate within the country and, increasingly, join ranks. Both Pakistan's Tehrik-e-Taliban, known as the TTP (referred to in this report as the Pakistani Taliban), which since 2004 have sought the withdrawal of the Pakistani military from the FATA through attacks on the Pakistani central government, and the Afghan Taliban, which use the FATA as a refuge to wage a major insurgency against the U.S.-led coalition in Afghanistan, have incubated in the tribal belt. Beyond the border areas, a number of militant groups, like Lashkar-e-Taiba, operate primarily in Kashmir and India, with the objective of influencing the rivalry between Pakistan and India, while others, including Lashkar-e-Jhangvi, are essentially sectarian Sunni groups primarily focused on attacking minority-Shia targets. Yet another set of paramilitary groups, like the Balochistan Liberation Army, have secessionist ambitions, and have sought autonomy from the federal government in Islamabad.

Drawing sharp distinctions between these militant factions in Pakistan has become more difficult due to the growing number of links between them: Al Qaeda reportedly now provides support to sectarian factions carrying out attacks within Pakistan;¹⁴ some Kashmiri militants operate in Afghanistan and have participated in other international conflicts; and traditionally sectarian groups are increasingly supportive of the Taliban's efforts to take over or assume control of local government structures through "Talibanization."¹⁵

In addition to distinguishing between Pakistan's various militia groups, there is also a distinction between militant attitudes and the actual use of violence. Recent scholarship by Christine Fair of Georgetown University on the politics of militancy investigates support for militant groups across the country, highlighting the importance of these groups' popular



Figure 1: Provincial map of Pakistan

bases of support. Her survey research, done in cooperation with colleagues at Princeton and Stanford Universities, shows that a substantial majority of Pakistanis adhere to the view that the concept of "jihad" refers to a duty to protect fellow Muslims through war or militarized means, rather than just a personal struggle.¹⁶ The prevalence of such attitudes is clearly an enabling environment for militant violence, including the emergence of paramilitary groups and the increase in violent attacks. This report is based on an expansive definition of militancy that encompasses both support for violent militants and participation in the violent activities of these groups.

International security consequences

It is now widely recognized that the militant violence that embroils parts of Pakistan and peaked in 2009 has far-reaching regional and international security implications. U.S. president Barack Obama has called Pakistan's tribal areas in the FATA "the most dangerous place in the world" for Americans.¹⁷ As the failed Times Square bombing plot demonstrates, international terrorist attacks linked to the tribal belt represent an ongoing transnational security risk. A recent analysis of 21 large-scale international terrorist plots since 2004 shows that in more than half of those cases, plotters "received direction from or trained with al-Qaeda or its allies in Pakistan."¹⁸

In addition, Kashmir-centered militancy risks exacerbating interstate tensions between Pakistan and India, two nuclear powers. The 2001 terrorist attack on the Indian parliament, which has been linked to Pakistani militants, prompted India and Pakistan to mobilize troops along their common border and the Line of Control in Jammu and Kashmir, highlighting the risk of a nuclear exchange between the two states. The 2008 attacks in Mumbai prompted similar concerns. There are also concerns that with the weakening of Pakistan's central authority and control over its territory, its nuclear arsenal could fall into the wrong hands, including militants.

Conclusion

The emergence of specific militant groups and the spreading terrorist attacks are linked to different root causes. Yet overall, the nationwide trend in recent years has been an increase in and intensification of militancy. The significant domestic and international stakes associated with continued militancy in Pakistan therefore raise a key question: What can account for the continued violence?

Among the various reasons cited for the rise of militancy across Pakistan over the past three decades includes the Pakistani army's patronage of militant groups as a means of securing geostrategic objectives in Kashmir and Afghanistan, which is well known and has had long-running detrimental effects on Pakistan's stability.¹⁹ Programs of Islamization, instituted primarily under the dictatorship of General Zia ul-Haq (1978-88) in the wake of Iran's Islamic revolution, are also widely believed to have left Pakistan a more radicalized, sectarian society.²⁰ Likewise, foreign funding of religious and sectarian institutions across Pakistan, the federal government's neglect of economic development in Pakistan's hinterlands, political instability and the U.S.-led war in Afghanistan and drone attacks on Pakistani territory have inflamed public opinion, fueling an already combustible mix.²¹

The dismal state of the nation's education sector is one risk factor that has attracted a great deal of attention. Yet analysts have largely failed to carefully examine Pakistan's education landscape, leading to mischaracterizations and oversimplifications of the role of educational institutions in fueling Pakistani militancy. Understanding the characteristics and weaknesses of Pakistan's education sector is key to developing better explanations of the link between education and militancy.

UNDERSTANDING PAKISTAN'S EDUCATION LANDSCAPE

Ithough there have been important positive A developments in Pakistani education policy, access to education and the quality of education remain abysmally low at the national level. Pakistan's education system, similar to that of the U.S., is federal, with distinct roles at the national, provincial and district levels. At all levels, schools are the primary responsibility of the district government, with the national government intervening in areas such as curriculum development, monitoring of education performance and accreditation and financing of research. Both the process of curriculum development and the approval of textbooks has been, until very recently, centralized at the federal level, whereas the responsibility of developing textbooks has rested with the provinces. In April 2010, new constitutional reforms were signed into law, which has opened up new possibilities for greater participation in curriculum development at the provincial level but at the time of writing the full implications of the law were unclear.

Since the early days of the republic, central government policy has recognized the need to improve both the access to education and its quality nationally. For instance, in 1959, a national commission on education concluded that high-quality textbooks are critical because they serve as a "basic teaching tool," and yet to this day, the quality of textbooks remains notoriously problematic.²² Likewise, the 1973 Constitution of Pakistan stipulates: "The state shall remove illiteracy and provide free and compulsory primary and secondary education within minimum possible period." Yet not only is education for all Pakistanis still not a reality, but both literacy rates and access to basic education remain among the lowest in the world.²³ At least 35 successive government reports have warned of the poor quality of school examinations between 1959 and 1993, with little to show for it today.²⁴ The most recent constitutional reforms guarantee citizens a "right to education," providing that "the state shall provide free and compulsory education to all children."²⁵ Much must be accomplished to address the gap between this objective and the number of Pakistani children not enrolled in school. Indeed, the New Education Policy for the next decade emphasizes the noble objectives of improving governance and management in the education sector and increasing spending. A new Pakistan Education Task Force, spearheaded by the Ministry of Education with support from the UK government, is currently engaged in helping provinces implement the new education policy.

Government fails to supply education

In stark contrast to the lofty goals expressed in Pakistani policy over the years, a brief review of the performance of Pakistan's schools is sobering.²⁶ During the past decade, both literacy and primary enrollment rates each rose nationwide by about 10 percentage points, marking a significant improvement over previous decades. Yet current attainment levels remain extremely low. Just 54 percent of the population can read. There are currently 47 million illiterate adults in Pakistan, a number that is expected to increase to nearly 50 million by 2015, making Pakistan one of the few countries in the world in which the illiterate population is growing. In contrast, India's illiterate population is expected to decrease by more than 8 million by 2015, and the illiterate populations of Iran and Bangladesh are forecast to decrease by 1.8 million and 350,000, respectively. After Nigeria and India, Pakistan has the highest number of out-of-school children, with 6.8 million kids between the ages of 5 and 9 not in school. Less than one-guarter of Pakistani girls complete primary school. Of the children who

do enroll in school, 30 percent will drop out by grade 5. Only one-third of Pakistani children receive a secondary education, with many dropping out. With a gross national income per capita of \$980, Pakistan is among the poorest countries in the world, yet even when compared with states at similar income levels, the country fares poorly (table 1). Pakistan ranks near last on education indicators among the countries of South Asia. Moreover, there are enormous gaps between population groups within Pakistan, including rural versus urban, and deep gender differences. Compounding all these difficult challenges, more than half the population is below the age of 17, while the proportion of youths is increasing.

Among the reasons that Pakistan's education sector lags behind that of other countries are the political instability and the frequent change of regimes in recent decades; the Pakistani landed elite's resistance to education for the poor; the country's long-standing history of civil strife and militancy; and the patronage and corruption that mark all public spending. High military spending, which is on average 3.3 percent higher than in other countries in the same income group, also comes at the expense of spending on social services. William Easterly argues that Pakistan's overspending on the military compared with other countries at similar income levels is roughly statistically equal to the country's underspending on education and other social services.²⁷

Whatever the specific reasons that Pakistan underperforms, the one point on which experts agree is that education attainment in Pakistan tends to be associated less with low demand for education among parents and more with the limited government supply of schooling. The reasons that children are not enrolled have less to do with factors like household poverty, the opportunity cost of sending children to school rather than to work, or negative attitudes about sending kids to school.²⁸ New research by Tahir Andrabi of Pomona College and others as part of the Learning and Educational Achievements in Punjab Schools (LEAPS) project shows that the demand for high-quality schooling is generally strong across communities in Pakistan, and that parents are willing to pay a high price if necessary to send their children to a decent school. These scholars find that in Punjab:

Even among the poorest one-third of households, out-of-pocket expenditures, at Rs. 100 per month, amounts to 75 percent of government educational spending on this group. Across the board, more than one-half of children's educational expenditures are now borne by parents. Even though government schooling is a free option, poor parents are spending substantially on their children's education.²⁹

Another recent study shows that parents are more likely not to enroll their children in school when they perceive that their local schools lack high-quality teachers.³⁰ Such findings confirm recent polls in Pakistan, which show that large majorities of respondents are critical of the poor guality of public schools and expect more, especially in terms of large class sizes, poor-quality facilities and unmotivated teachers.³¹ A World Bank study finds that parental decisions not to enroll children in school are often based on the perception that the school has poor teachers.³² Though certainly demand-side barriers continue, in general the main obstacle to better education in Pakistan appears to be the supply of schools and in particular, the complex challenges facing the public education sector.

	Adult literacy rate, 2007	School life expec- tancy (expected # of years of formal schooling), 2007 total	Net Enrollment Ratio in primary education (%), 2007 total	Public expenditure on education as % of GNP, 2007
United States	99	15.8	92	5.7
World	84	11.0	87	4.9
Developing countries	80	10.4	86	4.5
Sub-Saharan Africa	62	8.6	73	4.5
South and West Asia	64	9.6	86	3.8
Pakistan	54	7.1	66	2.8

Table 1: Pakistan's education statistics in context

Source: UNESCO, EFA Global Monitoring Report 2010: Reaching the Marginalized (Paris: UNESCO, 2010).

Within Pakistan, disparities in educational attainment

In addition to its strikingly low overall educational attainment rates, Pakistan suffers from deep disparities in the schooling available to different groups across provinces. Some perform above the national average, while others fare significantly below, meaning that any security implications are likely to be particularly pronounced in some parts of the country but less severe in others. Literacy is highest in Sindh, for instance, while it is significantly lower in Balochistan.³³ Indeed, Balochistan has the worst education indicators in the country with literacy rates for rural women well below 10 percent and one thousand schools lacking any shelter at all.³⁴ The government has also failed to bridge the divide based on income, language, gender and region. These inequalities in access to education are discussed at greater length below, in the subsection titled "Mechanism 5: The inequitable provision of education."

In addition, there is variation in attainment by type of school, including public schools, private schools and madrasas (table 2). Though public schools are run by the district government and follow the federal government's prescribed curriculum, many private schools are not registered with the state and most receive no support from the government. Also, in public schools, the primary language of instruction is typically Urdu or in rare cases another local language, whereas elite private schools often teach in English with low-cost private schooling using Urdu or other languages. Public schools and their low cost private alternatives usually use the same government curriculum; however elite English medium schools follow a different curricular system. All schools tend to include Islamic studies as part of their regular course of study.

As mentioned above, all private schools are not elitist and unaffordable for the average Pakistani family. As discussed in the next section, many small private, lowcost schools have sprung up in recent years, including in rural areas. New data on Punjab Province obtained

Table 2: Enrollment by school type

Type of School	Estimated Percentage of Enrolled Children	
Government	64-67	
Private	29-33	
Madrasa	1-7	

Sources: Ministry of Education, Government of Pakistan, "Pakistan Education Statistics 2007-08" and Christine Fair, The Madrasa Challenge: Militancy and Religious Education in Pakistan (Washington: U.S. Institute of Peace, 2008).

by the LEAPS study research team shows that "one half of all new private schools have set up in rural areas and they are increasingly located in villages with worse socioeconomic indicators."³⁵ Approximately 33 percent of schoolchildren in Pakistan now attend private rather than public schools, though there is wide variation by province (figure 2). However, there is an ongoing debate within Pakistan about the benefits and shortcomings of largely unregulated private schooling.

Yet the most important distinction is between the quality of education in public versus private schools. The LEAPS study suggests that private school students score significantly higher in English and mathematics than do public school students, at least in Punjab, even within the same socioeconomic class. Moreover, parental satisfaction is much greater in the private sector; "when asked to rank all the schools in the village, parents were 26 percentage points *less* likely to rate a government school as 'good' or 'excellent' compared to their private counterparts."³⁶ Though the study shows that in some villages there certainly are good-quality public schools that outshine their private school counterparts, on average private schools perform better.

Madrasas offer parents an alternative type of schooling, in addition to public and private schools, generally at the level of secondary education. Lower-income households are slightly more likely to send their children to a madrasa than to another type of school, but the relationship is weak.³⁷ As we discuss in the following section, although madrasas tend to be free of charge, families tend to use them because they prefer a religious education for their children, rather than for their affordability. One recent study by the LEAPS project finds that madrasas are far less likely to locate in poor villages than in wealthy ones.³⁸

For the most part, madrasas are associated with one of five religious educational boards, which are sectarian in orientation. Four are Sunni (Deobandi, Ahl-e-Hadith, Barelvi and Jamaat-i-Islami), and one is Shia. The texts used in each type of madrasa reflect a particular interpretive tradition of Islam. Reliable data on the sources of their funding are not available, but many observers believe madrasas receive substantial funding from foreign powers. Under the Ronald Reagan administration, some received support from the U.S. government as a way of influencing the outcome of the Afghan-Soviet war. The language of teaching in madrasas is usually Urdu or Pashto, with special emphasis on learning Arabic and Persian.



Figure 2: Geographical distribution by school type

Note: "FANA" refers to the Federally Administered Northern Areas; "ICT" refers to the Islamabad Capital Territory; "AJK" refers to Azad Jammu and Kashmir.

Source: Drawn from a presentation by the Institute for Social and Policy Sciences (Islamabad), shared with the authors by the institute.

In 2002, under the Pervez Musharraf government, an effort was made in the wake of the September 11, 2001, terrorist attacks to "secularize" Pakistani schools as a way of helping to mitigate terrorist militancy. The Education Sector Reform sought to, among other things, encourage madrasas to revise and expand their curriculum by providing compliant seminaries with grants. The effort included \$113 million over five years. Yet few traditional madrasas have stepped up and accepted the funds.

The quality of schooling in madrasas varies widely. Rates of madrasa attendance also vary by region, and they are most popular in the tribal areas.³⁹ Yet one of the clearest findings to come out of recent education-related survey research is the small proportion of students who attend religious seminaries full time. As discussed in the next section, while there is some disagreement as to the numbers, all sources concur that fewer than 10 percent of Pakistan's enrolled children attend these schools.

In addition to government-run public schools, the state sponsors a small number of private schools that are subsidized for the children of government employees. While they are open to children whose parents are not in government, tuition is higher and access is more limited for the children of parents who do not work in government. Many are administered by the military, but some are also run by the Pakistani customs department and the national railway administration. On account of these schools' exclusive nature, one prominent Pakistani scholar deplores the fact that "the state has invested heavily in creating a parallel system of education for the elite, especially the elite that would presumably run elite state institutions in the future."⁴⁰

What happens inside the classroom

A new set of evidence-based studies is beginning to open up the black box of education statistics in Pakistan, shedding light on what is actually happening inside classrooms: the availability of teaching materials and basic infrastructure within the classroom, what teachers are teaching and what children are actually learning. Pakistan is notorious for its "ghost schools" that exist only on paper. Though estimates of the number of ghost schools vary, a survey conducted by the provincial governments of Sindh and Punjab in 1998 found that in the two provinces with the country's highest attainment rates, 25,000 teachers on the payroll who allegedly taught in what turned out to be more than 1,000 primary and secondary ghost schools did not actually report to work.⁴¹ Among other glaring gaps, fewer than half of all classrooms

that are open for business have desks for children. Student/teacher ratios are rising, and already exceed 35 students for every teacher.⁴² Learning outcomes and teacher performance are very poor, as we discuss below in the section on how education fuels militancy in Pakistan.

Conclusion

This brief review of the education sector in Pakistan indicates that far from being an anomaly, the average madrasa functions to a large extent on a par with other schools in the country, with private schools performing better on average than other types of schools. Furthermore, madrasas account for a tiny fraction of student enrollment, and they can hardly be cast as the main obstacle to high-quality education and stability in Pakistan. In light of these findings, the almost exclusive focus on madrasas as a security challenge–which is especially prevalent in the West–needs to be corrected.

MADRASAS ARE NOT THE MAIN PROBLEM

Much attention has been given to the role of madrasas in fueling militancy. At the heart of the debate is the Pakistani government's failure to provide adequate education, which according to many observers has parents turning to madrasas as an alternative means of educating their children. Allegedly as a result, a new generation of children has become more radical than their parents, explaining the recent rise in militancy. The U.S. 9/11 Commission report warns that "millions of families" are now sending their children to madrasas and that "many of these schools are the only opportunity available for an education."⁴³

This "madrasa story," though prevalent, is only partially accurate. A systematic review of the complex and sometimes contradictory data on madrasas in Pakistan demonstrates that a small number of militant madrasas directly contribute to militancy and are a serious security concern. Infamously, madrasas educated and trained the Taliban leadership during the Afghan-Soviet war in the 1980s. Moreover, there are concerns that in a minority of hardline madrasas:

- Militants use these schools as a location to recruit (as in mosques and through networks of friends).⁴⁴
- A madrasa education may make students more prone to become suicide attackers, on the grounds that violent jihad is allegedly a religious duty, though this and other issues pertaining to the quality of education are extremely difficult to research rigorously.⁴⁵
- Madrasa education fosters worldviews more generally that make students more supportive of violence, especially violence against India.⁴⁶
- Madrasa education is inherently sectarian and makes students more likely to engage in violence against other religious sects.

However, the data do not show that Pakistani parents have turned in large numbers to madrasas to educate their children, or that a large share of Pakistani children have been radicalized as a result of attending religious seminaries. There are at least three reasons why the argument that madrasas are primarily responsible for the rise in militancy does not hold.

No steep rise in madrasas

The first reason why this argument does not hold is that there are far fewer madrasas in Pakistan as a share of all schools than previously thought. The number of madrasas in Pakistan has recently come under debate. In 2002, the International Crisis Group issued a report claiming that a third of all full-time Pakistani students were enrolled in madrasas.⁴⁷ A 2005 report by the World Bank found these accounts to be exaggerated and estimated madrasa enrollment at around 1 percent of total school enrollment (involving about 475,000 students).⁴⁸ The International Crisis Group subsequently revised its initial estimate significantly downward.

Current estimates of madrasa enrollment vary, but there is a consensus that it is well below 10 percent of the full-time school-going population. A 2007-8 estimate by the Ministry of Education found that 1.6 million Pakistani students were enrolled in Madrasas, which is slightly more than 4 percent of all the country's fulltime students. The number of students enrolled in madrasas varies by region, with more than 7.5 percent in some areas of Balochistan and Khyber-Pakhtoonkhwa near the Pakistan-Afghanistan border.⁴⁹

These estimates are based, in part, on a national census and household survey, which means that these numbers exclude some potential madrasa students, such as orphans or homeless children. Other data limitations include concerns with how Pakistan's 1998 census was carried out (upon which much of the data on madrasas are based); the exclusion from surveys of the FATA and some areas of Khyber-Pakhtoonkhwa, which potentially have greater numbers of madrasas; the fact that many surveys obtain data from school administrators who have a financial incentive to overreport enrollment; and the fact that some students only attend Koranic classes in the evening rather than full time.

Certainly, the number of madrasas in Pakistan has increased, especially in the 1980s. At the time of Pakistan's independence in 1947, there were fewer than 300 madrasas in Pakistan. In the 1980s, the Iranian Revolution and Afghan resistance to the Soviet occupation of Afghanistan generated a rapid increase in madrasa attendance throughout the Muslim world. There were several thousand madrasas by 1991, after which time the number of madrasas appeared to level off.⁵⁰ As a share of all new schools in Pakistan, however, the increase in the number of religious seminaries has been limited. As figure 3 indicates, the most significant increase in recent decades has been in the number of private schools, not madrasas.

As the quality and availability of public schools has declined since the 1980s, it is to private schools that parents have therefore turned in the largest numbers.⁵¹ The picture that emerges from the latest available data is thus not that parents have turned in droves to madrasas for lack of adequate public schools but that they prefer sending their children to private schools, for reasons having to do with the quality of education they expect their children to receive there. The notion that an alleged steep rise in madrasas and in madrasa enrollment explains militancy is therefore not supported by recent data.

Demand for legitimate religious schooling

The second reason why this argument does not hold is that the few families that do choose to send their children full-time to madrasas often do so not out of necessity but preference. The importance of a religious education for instilling good morals and proper ethics is often cited by parents. In the words of one Balochi mother, "Islam is a good religion, and we want our children to benefit from all it offers. It is only certain interpretations that give it a bad name."52 One expert who interviewed a representative sample of families in the Punjabi city of Rawalpindi recently found that nearly half the families he interviewed cited religious education as their "top educational priority."⁵³ Nearly 60 percent said they would not be satisfied if their children were not offered the possibility of attending a madrasa, even if "madrasa graduates suffer from unemployment."⁵⁴ This finding is supported by survey data showing that the current generation of Pakistani students shares its parents' religious beliefs.55

The data from the LEAPS study show that the majority of families that send a child to a madrasa also send their other children to other types of schools, either government-run or private.⁵⁶ This suggests that it is not income that solely drives the choice of sending a child to a madrasa-indeed, madrasas have a higher proportion of wealthy students than do public schools-but also a strategic choice to diversify children's employment potential. After all, the traditional career path for a madrasa graduate-becoming a Koranic scholar or Islamic political party leader-confers status on the family and can often not be achieved through either public or private school routes. Moreover, despite this type of strategic decisionmaking by parents, data from rural Punjab show that in localities where only a madrasa was available, and there were no public or private schools from

Figure 3: Growth rate of different types of schools



Source: Drawn from a presentation shared with the authors by Tahir Andrabi on "Schools of Last Resort: Madrassa Location in Rural Pakistan" (2009).

which to choose, more families chose to keep their children out of school than send them to a madrasa.⁵⁷

A few bad apples

The third reason why this argument does not hold is that the evidence is now increasingly clear that though some madrasas have been linked to militancy– especially madrasas associated with the Taliban and sectarian militants–the majority of madrasas have neither a violent nor an extremist agenda. Given the increasing demand for religious schooling in Pakistan, policymakers must be very cautious about discriminating between the radical elements among madrasa institutions and those that are peaceful. Recent evidence on the backgrounds of militants and the connections between madrasas and militants is very mixed. On the one hand, there is evidence that madrasas in the tribal areas and those associated with anti-Shia militant groups have produced militant recruits, particularly suicide terrorists.⁵⁸ It is a well-known fact that during the Soviet war in Afghanistan, madrasas were established in Afghan refugee camps along the Pakistani border instead of traditional schools, in order to train fighters for the resistance movement. Today, madrasas in the tribal areas remain linked to the militancy in North and South Waziristan, and also with the Taliban insurgency within Afghanistan, as one study based on interviews with officials in Pakistan and Afghanistan shows.⁵⁹ Likewise, Deobandi madrasas have well-established links with groups such as Sipah-e-Sahaba-e-Pakistan, and one recent study of Islamabad and Ahmedpur in Punjab finds that madrasa concentration is correlated with sectarian attacks.⁶⁰ A limited number of madrasas have proven vulnerable to recruiters affiliated with militant groups.⁶¹

However, a recent study of militants involved in the Kashmir dispute suggests that few are recruited in madrasas.⁶² Other Pakistan experts confirm this, suggesting, for instance, that Lashkare-e-Tayaba draws its recruits not from madrasas but from universities, colleges and among unemployed youths.⁶³ This finding is consistent with studies of terrorist recruits in other parts of the world, which, though suffering from methodological flaws, suggest that recruits are not generally less well educated or poorer than the average citizens in their country of origin.⁶⁴ Research by Peter Bergen and Swati Pandey also shows that the recruits involved in five of the largest international terrorist attacks had no connections to madrasas.⁶⁵

These mixed results indicate first and foremost that there is no one-to-one relationship between madrasas and militancy. One reason may be that, as Ethan Bueno de Mesquita of the University of Chicago and Christine Fair have suggested, some militant groups seek out skilled recruits to carry out sophisticated attacks, whereas others typically attack soft targets and may not require recruits with the same level of skill.⁶⁶ Suicide bombers in Afghanistan and the tribal areas tend to be young, illiterate and poor, and were recruited by the Taliban in local madrasas. Suicide attacks conducted by the less-skilled attackers in Afghanistan are less lethal than in other theaters. By contrast, attacks carried out by Kashmiri groups in India require significantly better-trained recruits who are unlikely to have been found in a madrasa. More research is needed to determine whether families with extremist views tend to choose madrasas over other types of schools, or whether madrasas are radicalizing students.67

Another reason for the conflicting findings on madrasas and militancy may be that the link to militancy has at least as much to do with the quality of education conferred by a particular school as with whether it is a religious seminary. Educational attainment can mean exposure to valuable life and citizenship skills-or it can mean being exposed to a culture of hatred and logic of violence. The content of education may be far more important than the religious or secular curriculum. In fact, madrasas are far from being the sole providers of religious education. As mentioned above, students in government schools, private schools, and madrasas in Pakistan all receive education in Islamic studies. In public schools, Islamic studies is a compulsory subject. The major difference between madrasas and other schools is that government and private schools teach Islamic studies in addition to modern subjects such as mathematics, science, and English whereas traditional madrasas teach religious studies exclusively. Yet many madrasas are broadening their curriculum to include modern subjects such as math and English. New schools are emerging that offer a curriculum combining secular and Islamic studies. A number of madrasas follow the government-prescribed curriculum. Consistent with evidence that religious education per se is not associated with militancy, new survey data indicate that neither personal religiosity nor support for sharia law predicts support for Islamist militant organizations such as the Taliban. Only support for sectarian militant groups is associated with greater religious belief.68

Conclusion

The bottom line is that madrasas are not nearly as prominent on Pakistan's educational landscape as was previously thought. Though a small number of militant madrasas aid in recruiting militants and indoctrinating students, making them more prone to engage in suicide terrorist attacks and more supportive of violence, these schools are too few to have a major impact on militancy across the country. Far from rushing to send their children to religious seminaries because of a lack of alternatives, Pakistani families are actually turning mainly to private schools. First on the minds of these parents appears to be the quality of schooling available to their children, which is judged to be poor in government schools. This fact draws attention to an important feature of Pakistani schooling: Generally speaking, neither the public schools nor Pakistan's madrasas have delivered the caliber of education that parents are looking for and expect. Given the far greater number of public schools than madrasas in Pakistan, this raises an important question: Could Pakistan's low attainment ratios and poor quality of schooling in and of themselves be an important contributor to militancy across the country? Both global econometric research on education and conflict and Pakistani scholarship call attention to the role of limited access to and quality of schooling in fueling largescale violence.

MILITANCY: WHAT'S EDUCATION GOT TO DO WITH IT?

he Pakistani government's failure to provide adequate access to high-quality education has not led to an explosion of radical madrasas, as conventional wisdom holds. Global data on conflict risk provide an alternative set of explanations as to why the poor state of education in Pakistan could in and of itself be contributing to militancy. Eight out of the 10 countries with the lowest primary enrollment rates in the world experienced some form of conflict between 1990 and 2005.69 Between half and a third of the 72 million children not in primary school reside in conflict-affected states.⁷⁰ The close relationship between education and conflict is also reflected in the number of schools that have been the target of attacks in conflict zones globally. Pakistan was recently highlighted in a UN report for being one of the few countries in the world where attacks on education have dramatically increased over the last several years.⁷¹ In the Swat Valley, 356 schools were destroyed or damaged during recent fighting between the Pakistani Taliban and the army.⁷² The Pakistani Taliban have repeatedly claimed responsibility for attacks on girls' schools in the north along with recent bombings of women students at universities in the heart of Islamabad.⁷³ Thus, even if the conventional madrasa story does not hold true, there are important reasons to carefully examine other potential links between education and armed conflict in Pakistan.

Such scattered evidence is instructive, but in and of itself does not demonstrate a relationship between education and conflict. It is not clear from such data, for instance, whether poor schooling contributes to conflict or vice versa. Does the relationship merely reflect the fact that wars tend to destroy education systems? A more compelling case can be made based on a new body of global research, which has identified lack of access to high-quality education as a significant risk factor for conflict. A meta-analysis of several cross-country studies shows that low educational attainment is one of the few statistically significant factors that helps to predict the outbreak and continuation of conflict.⁷⁴ The data suggest that an increase in net primary enrollment rates from below the world average of 87 percent–Pakistan's rate is 66 percent–to above the mean can cut the risk of continued conflict by nearly three-quarters.⁷⁵

Poverty increases the risk of armed conflict

For years, scholarship on the relationship between schooling and violence focused primarily on the impact of conflict on development, including education. More recently, however, a growing body of global econometric literature has been exploring the reverse relationship-namely, how underdevelopment, including low educational attainment, increases the risk of conflict in poor countries. This econometric research analyzes the relationship between social, economic and political indicators, using a large set of countries and different time periods. This research has now demonstrated conclusively that countries with low income per capita are at an increased risk of civil conflict, defined as battle-related deaths of more than 25, 100 or 1,000 per year, depending on the definition.⁷⁶ Thus, for a country at the 50th percentile for income (like Iran today), the risk of experiencing civil conflict within five years is 7 to 11 percent; for countries at the 10th percentile (like Ghana or Uganda today), the risk rises to 15 to 18 percent. This finding is important because it challenges the popular theory that civil conflict derives primarily from ethnic, religious or cultural cleavages, focusing instead on the feasibility of insurgency in some countries.

Despite the robustness of the empirical relationship between low income and conflict, there remains a substantial debate as to why this relationship holds. One interpretation emphasizes opportunities for rebellion and the conditions under which a rebellion becomes financially and militarily viable.77 Though in most countries some groups are willing to resort to armed conflict to attain their aims, only in a small subset of these countries do rebels actually have the financing, numbers of people and military equipment to do so. Another approach focuses on the state's lack of capacity to deter and defeat insurgencies. Low national income per capita is important because it proxies for a state's financial, administrative, police and military capabilities. It also allows rebels to recruit "young men to the life of a guerrilla."78

Countries with low education levels are at greater risk of conflict, irrespective of income

Education is gaining ground as a means of explaining why poverty puts countries at an increased risk of conflict. A number of recent studies have tested the relationship between education variables and conflict, and increasingly, they find that the two are correlated. As one scholar recently put it, "While there remains some conflict between results, it does appear that a consensus is emerging on childhood education-primary and secondary education both seem to reduce the risk of civil war."79 Education occupies a special place in the global econometric literature-not just because a consensus is emerging on its relevance to conflict but also because it is one of the few variables that governments can hope to improve through policy interventions. Other variables that have also been found closely correlated to conflict are somewhat less relevant from a policy perspective because they are difficult or impossible to influence. These include the

presence of oil, large populations and a legacy of conflict and instability.⁸⁰

In an early study, one scholar finds that increasing enrollment rates in secondary school by 10 percent can reduce the average risk of conflict by 3 percentage points, and that male secondary school enrollment rates are negatively related to the duration of conflict.⁸¹ Another more recent study finds that "an increase of one year in the average schooling of the population is estimated to reduce the risk of civil war by 3.6 percentage points."⁸² Studies on the conflict in Sierra Leone, and earlier global econometric studies, confirm the general finding that low education levels tend to predict the outbreak of conflict (figure 4).⁸³

As the research agenda on educational attainment and conflict expands, two specific correlations have emerged as particularly strong. Supporting the argument that conflict is more likely in regions or countries where militants or insurgents have more opportunities to recruit, several scholars find an especially strong relationship between secondary male enrollment ratios and conflict risk.⁸⁴ One recent study identifies the conditions under which low secondary male enrollment can become a vulnerability–namely, in low- or lower-middle-income countries with a young male population bulge.⁸⁵ Another study finds that increasing secondary male enrollment has the highest marginal value, the lower enrollment rates are to begin with.⁸⁶

But does the relationship between education levels and conflict hold, irrespective of the level of income? That education and conflict are linked does not come as a surprise, given that low income has now been established as a causal factor in explaining conflict. Given the link between low education levels and low income, and between low income and civil war, we



Figure 4: Probability of conflict at different levels of educational attainment

should expect a poorly performing education system to generate poverty and inequality, each of which has been found to increase the likelihood of civil war.⁸⁷ Education increases productivity, which in turn decreases the likelihood that recruits will join militant groups rather than, say, find legitimate employment. Interestingly, postsecondary enrollment, schooling inequality and expenditures on education have no measurable impact on conflict risk.⁸⁸ Public spending on education includes tertiary education, which often serves to intensify social and economic cleavages, and is unlikely to mitigate the risk of conflict.

Recent scholarship has tested the proposition that education correlates with conflict risk, and that this relationship holds regardless of income, and confirms the explanatory power of education.⁸⁹ Explanations for the correlation are still contested, and as we discuss in the following section, the global data on education are too coarse to provide insights into the reasons for the correlation. Clayton Thyne of the University of Kentucky hypothesizes that low primary school enrollment is a conflict risk because a lack of government spending on basic education may be perceived by citizens as constituting a lack of government responsiveness to their needs. He comes to this conclusion after analyzing the relationship between government spending on other social services, such as health, and finding that such spending also predicts conflict risk.⁹⁰

Source: Clayton Thyne, "ABC's, 123's, and the Golden Rule: The Pacifying Effect of Education on Civil War, 1980-1999," International Studies Quarterly 50, no. 4 (2006): 744.

What do these findings mean for Pakistan?

The global econometric literature on the causes of civil war is often invoked to make policy recommendations at the level of the international system. The robust connection between poverty and civil war, it has been argued, justifies policies that seek to increase economic growth in lower-income countries. Yale University scholar Nicholas Sambanis has argued that "raising levels of economic development will reduce the overall prevalence of political violence in the world."⁹¹ Yet what can this literature tell us about conditions in one country, namely Pakistan?

One potential challenge to applying the global econometric literature on civil war to Pakistan is the definition of civil conflict used in this literature. The global literature relies on a standard definition based on battle-related deaths, with civil war defined as any conflict involving at least 100-and according to some scholars, as many 1,000-battle-related deaths per year. At the heart of this definition is a distinction drawn by scholars between organized violence-such as an insurgency against a government or ethnic conflict between two warring factions-and mere spontaneous violence, such as a riot. The global literature seeks only to explain organized conflict, which requires significant resources and capacities, not spontaneous acts of violence. In this respect, much of Pakistan's militant violence seems to fit the bill.

Yet the question of whether civil war or terrorism best characterizes the violence in Pakistan still remains. Among the distinguishing characteristics of terrorist versus conflict-related violence is that terrorist organizations tend to be less coherently organized and more decentralized than insurgencies.⁹² Moreover, terrorist violence tends to focus on soft targets that are more easily attacked; to benefit from lower levels of popular support; to be in an asymmetric power relationship with the central government; and to achieve their political objectives by launching attacks that terrorize the public, rather than through direct strategic gains against an opponent. In contrast to civil conflict, several studies have found that recruitment into domestic terrorist groups typically is not fueled by underdevelopment or low income, although that finding remains contested.⁹³ Scholars reason that terrorism is less closely related to poverty and underdevelopment because terrorist groups require skilled recruits in order to stage large-scale attacks, and because launching a successful insurgency requires more financial and material resources than staging a terrorist attack.⁹⁴

Although it is important to be as precise as possible in characterizing the root causes of different forms of violence, in practice the distinction between terrorist violence and civil conflict often breaks down. Terrorism is a strategy of violence, and conflict zones are conducive environments for terrorist attacks.⁹⁵ Thus, terrorist events tend to take place primarily in countries affected by civil war, such as Iraq, Afghanistan and Somalia. Often, terrorist violence is used as a strategy in the initial phase of conflict, before full-blown civil war erupts. Governments frequently label conflict within their territory terrorism in order to play down the threat to the state.

In Pakistan, the distinction between terrorism and civil conflict is arguably breaking down. Certain militant groups, like AI Qaeda and the Kashmir-oriented hardliners, retain the structure of a terrorist group. But the Pakistani Taliban, which are attacking the central government and control parts of Pakistan's territory, have been engaging in attacks against the central government that have prompted counterattacks, leading to the kind of exchanges that typically characterize civil wars. The reported cooperation between groups makes it difficult to disentangle groups engaged in civil conflict from those that are not. The sharp increase in the level of violence across Pakistan also is characteristic of conflict. For the purposes of this study, therefore, we argue that while the fit between militancy in Pakistan and civil conflict is not perfect, there are sufficient grounds for analyzing conditions on the ground through a civil conflict lens.

We therefore argue that given low income and especially, very limited access to education in Pakistan, it is likely that the education sector is in fact helping to fuel militancy and armed violence. To be sure, demonstrating that the probability of conflict is higher in Pakistan given poor education measures does not provide specific information as to when or where violence will erupt, what form it will take, or how widespread it will be. Yet, all things being equal, policymakers have valid grounds to conclude that improving education would help to mitigate militant violence.

The global literature suggests that both the magnitude of the conflict risk in Pakistan, and the potential to mitigate that risk, are quite large if one considers the country's level of income and educational attainment. Indeed, a measure of how real a risk Pakistan's education sector represents are the quite precise and consistent risk coefficients for various development indicators found in the literature. A quick summary of this literature suggests roughly the following level of risk for Pakistan:

Low income. Pakistan ranks 166th out of 210 countries in terms of gross national income per capita, and it is classified by the World Bank as a lower-middle-income country.⁹⁶ Its rank places it in the company of states like Yemen, which ranks 169th, and Côte d'Ivoire, which also ranks 166th-both of which have experienced civil wars over the past de-

cade. Gross national income per capita in Pakistan is just \$980, placing the country just above the 20th percentile in terms of per capita income. The predicted risk of continued conflict in Pakistan is not as high as in a country like Guinea, in Sub-Saharan Africa, which has an income per capita at the 10th percentile and somewhere in the vicinity of a 15 to 20 percent chance of experiencing conflict within 5 years. Yet Pakistan is much closer to the danger zone than countries at the 50th percentile for income, such as the Dominican Republic, which have only a 5 to 10 percent risk.

- Secondary school male enrollment. Pakistan ranks near last in the world in terms of secondary school male enrollment, with a net male enrollment rate of about 37 percent, compared with a world average of 60 percent.⁹⁷ Studies show that if the male enrollment rate were just a few percentage points above the world mean, all other things being equal, the risk of continued conflict could be expected to come down from 10-15 percent to about 8 percent. The risk of low secondary male enrollment is particularly pronounced in Pakistan given the large youth bulge, with 36 percent of the population younger than age 14.98 The countries with low secondary male enrollment rates that are at highest risk of conflict are those with low income per capita and large youth bulges.
- Primary school enrollment. Like secondary male enrollment, primary school enrollment is a strong predictor of conflict. In Pakistan, however, net enrollment rates have increased over the past decade, and they present less of a risk than other educational measures. The literature suggests that an increase in primary enrollment rates from well below the world average of 87 percent to well above the mean can cut the risk of conflict by nearly threeguarters.

The argument that Pakistan's education system represents a risk factor for continued militancy finds additional support at the subnational level, for access to education varies widely from one province to another. The conflict data show that in this decade, violence has been most intense in the FATA, with the insurgency in Balochistan coming in a close second in terms of conflict intensity. Likewise, suicide and other attacks were most prevalent in Khyber-Pakhtoonkhwa, followed by Balochistan, the FATA and Sindh and Punjab. These also appear to be the regions of Pakistan with the lowest educational attainment rates, though a systematic analysis across Pakistani provinces would need to be carried out to determine whether any correlation exists based on data from within the country.

Conclusion

In closing this section, we should be clear about our argument and what it implies. Of course, research at the global level cannot *predict* the occurrence of conflict in any specific part of Pakistan, or even at

any particular point in time. However, both the robust nature of the findings concerning the link between education levels and conflict and the precise and consistent risk factors that various studies have identified provide a prima facie case for looking more closely into the relationship between the education system and the rising militancy in Pakistan. Though there are certainly numerous factors contributing to the violence, and explanations of different conflicts within Pakistan vary, increasing access to education will likely help to mitigate the violence. To confirm the applicability of the global data to the case of Pakistan, of course, empirical data drawn from that country would be ideal. Thus far, however, such data remain largely missing. In the next section, we summarize the latest findings of Pakistan scholars concerning the links between the level and quality of education, and Pakistani militancy.

WHAT WE KNOW ABOUT EDUCATION AND MILITANCY IN PAKISTAN

Two sets of studies by scholars of Pakistan shed light on the question of how schooling fuels militancy, but there remain large gaps in this research. In line with research on the background of terrorist recruits globally, one strand looks at the profiles of Pakistani militants and seeks to determine their educational background, income and other biographical information. Christine Fair conducted an insightful survey of families in Punjab and Khyber-Pakhtoonkhwa who lost at least one child in militant violence in Afghanistan or Kashmir:

- A minority of militants were recruited in madrasas or in public schools, while none were recruited in private schools.
- Fewer than a quarter ever attended a madrasa, and of those madrasa alumni, most also attended public school.
- A majority had the equivalent of a 10th-grade education, whereas the average Pakistani child only attends school through grade 6.⁹⁹

The study suggests that there is not a strong link between militancy writ large and either lack of education or madrasa attendance. However, when the same study examined a smaller set of militants who were suicide bombers in both Pakistan and Afghanistan, Fair found that most did attend a madrasa, primarily in North and South Waziristan tribal agencies. She reasons that given the thin levels of support for suicide bombings in both countries, militant groups have no choice but to recruit among low-skilled madrasa students.

Studies such as this one are important given the dearth of robust information about the profile of militants in

Pakistan. However, they are also prone to three main shortcomings that may skew the findings. First, blunt measures of educational attainment may overshadow the quality of schooling that former students-either militants or peaceful citizens-received, which may be just as important. We discuss education quality and militancy in the next section. Second, focusing on the perpetrators of successful attacks ignores the larger pool of attackers who were not successful and were likely to be less skilled and educated. Third, it takes more than a skilled recruit to sustain a successful militant movement. Militants achieve greater success in environments that are conducive to their operations, where public support is high. Looking narrowly at the background of attackers misses the larger picture of the community of support for militants.

A second line of research moves beyond individual militants to examine the communities of support that anchor militant groups in a society. Several scholars have done significant work on public attitudes toward militancy in Pakistan. Here, the evidence is equally unclear. On the one hand, these studies find that the higher the level of education obtained by respondents, the less likely they are to support the Taliban and Pakistani sectarian groups.¹⁰⁰ However, the number of years spent in school seems to have no impact on support for AI Qaeda, with which the Pakistani public is least familiar, and on Kashmir-related militancy. One study suggests that support of Kashmir-related groups is tied to the quality of education, and particularly, the narrow anti-India worldview that is reflected in the curriculum and in textbooks, hypothesizing that the longer students are in school the more they are exposed to this perspective. Again, the evidence underscores the importance of the quality of education obtained. This is confirmed by another recent study showing that support for terrorist attacks in Pakistan is thin but tends to correlate with respondents' holding extremist views.¹⁰¹

Conclusion

The research on the backgrounds of militants and their communities of support is preliminary but represents a first step in gathering information on the sources of militancy across Pakistan. Significantly more research in this direction is needed to confirm or debunk these early findings, in order to better guide policy. Yet an important shortcoming of these preliminary data in relation to our study is that they shed little light on the question of why educational attainment is or is not, as the case may be, linked to militancy. Though we can hypothesize as to why support for Kashmirrelated groups does not fall with increased education levels, unlike support for other militant groups, it would be extremely useful from a policy perspective to have an explanation for these relationships. This is the question to which we turn in the next section.

WHY ARE EDUCATION AND MILITANCY RELATED?

A lthough certainly not the only or necessarily the most important cause of militancy, low educational attainment should not be ignored as a factor in Pakistan's continued violence. The cross-country data establishes a relationship between education and conflict risk, but does not explore the question of why they are related. A better understanding of this relationship is crucial for developing a more nuanced and better-targeted policy response. There are four widely accepted arguments about why education and militancy can be related. These insights suggest that expanding access to education, though clearly necessary, may not be sufficient for the purpose of reducing conflict risk.

The global metrics used in the econometric literature rely almost exclusively on fairly crude national-level data, such as enrollment rates. This means that less easily measured factors, like the content, quality and relevance of education systems–which may be just as important, if not more, as quantitative attainment levels–are not captured by these studies. Qualitative data from a body of scholarship on the intersections between educational processes, conflict and state fragility provide an excellent complement to the econometric data.

A central tenet of this scholarship, which draws from the comparative and international education field and is often referred to as the field of "education and fragility," is that education processes and systems are often purposely or inadvertently manipulated to influence conflict dynamics–usually to detrimental effect. In a seminal study, Kenneth Bush and Diana Saltarelli conclude that authoritarian regimes do not just bypass the critical functions of the education system, they subvert them to their own ends.¹⁰² Numerous studies confirm their findings.¹⁰³ Around the globe, educational processes and structures are inherently political and have a role to play in shaping individual and collective identity as well as social and political realities.¹⁰⁴ Who has access to education, the language of instruction, the content of the curriculum and the ways teachers teach–all of these themes are the subject of debate in virtually every country grappling with the quality of public education.

However, in contexts of state fragility, violent extremism and civil war, education can quickly become an arena for overtly advancing political agendas. Indepth analyses of education across historical and contemporary cases—from Northern Ireland to Sri Lanka to Sudan—have demonstrated that education can exacerbate conflict and violence. In these examples, education systems have been used to promote concepts of 'national purity;' to cultivate individual and collective identities that dehumanize segments of society; to exclude social groups from high-quality schooling and thus from economic and political power; and to implement policies of 'cultural genocide' by repressing the language, religion and other cultural forms of particular social groups.¹⁰⁵

The history of education in Pakistan is in many ways a textbook example of how educational processes and structures can shape conflict dynamics. Historically, education in Pakistan has been used as a tool by successive regimes in pursuing narrow political ends. For example, in 1947 the new national government of Pakistan selected Urdu as its national language and the language of instruction for schooling. In this linguistically diverse country, home to 6 major linguistic groups and 58 minor ones, this decision was not received positively by all.¹⁰⁶ It was seen as a move by Pakistan's elite ruling class to further entrench its power, and it was especially upsetting to the Bengalis in East Pakistan, very few of whom spoke Urdu. Many Bengalis, especially university students, were afraid that they would not be able to successfully complete their schooling, and that they thus would be excluded from a range of employment, political participation and other life opportunities. This Urdu policy was one of the first sources of conflict within the new country, leading to student riots protesting the language selection. Ultimately, the decision sowed the seeds for the 1971 war and the cessation of East Pakistan into a new nation, Bangladesh.¹⁰⁷ Today, while Urdu is one of the smallest linguistic groups in the country, spoken by less than 8 percent of the population, it remains the government's language of instruction for schooling.¹⁰⁸

Four reasons why education and conflict risk are often linked

Four broad approaches to education and conflictwhich we refer to as the grievance, worldviews, skills and opportunity arguments-stand out in the effort to explain why education and conflict risk are often linked. The first is that education systems can either serve to exacerbate or conversely to mitigate constituents' grievances against their government, which in turn can make citizens more or less likely to support militancy or to actually join a militant group. The second argument is the education system's power to shape students' worldviews and thereby either instill a more militaristic or radical outlook, or help students challenge extremist beliefs and develop more constructive and tolerant alternative realities, thus reducing the likelihood that they will support or join militants. The third argument holds that education systems can either teach peaceful "citizenship" skills, including literacy, thus equipping students with the means to seek to peacefully resolve conflicts, or schools can engage in what some specialists call "war

education" by condoning violence and fostering the escalation of physical violence. And the fourth claimwhich is more controversial when it comes to terrorist groups but does apply in contexts of civil war-is that limited access to high-quality education means that students are likely to have fewer employment prospects, which can increase the *opportunity* for militant groups to recruit. Let us examine each argument in more detail.

Governance-related grievances

The first argument underlines the importance of grievances in fueling support for militants and participation in militancy and conflict. Though the global econometric literature tends to focus primarily on the "greed" of insurgents and the opportunities available to rebels to launch an insurgency, scholars recognize that "grievances" are a necessary component of any explanation of conflict. There are a range of ways in which grievances are exacerbated by education, but the central tenet is that government neglect, discrimination or oppression can be-sometimes strikingly-manifested in education policies and services. The level and equitable distribution of government investment in social services, including education, may send a strong message to constituents that the central government is committed to building an inclusive society. By contrast, limited access to education can fuel instability because constituents perceive the absence of high-quality schooling as evidence that their government is neglecting them, which inflames their core grievances and thereby makes them more inclined to support militants or to join militant groups. Increasing access to education, given that communities often expect there to be a school in every village, is one of the most visible means of expanding the writ of the government, particularly in neglected or contested areas. To test this hypothesis, Clayton Thyne
includes not only education variables but also public health measures, such as the number of childhood immunization campaigns, and he finds that low health outcomes had the same "negative and significant effect . . . on the probability of civil war onset, providing strong support for the grievance theory."¹⁰⁹

Education also has the potential to promote discrimination and oppression, and hence to exacerbate another set of grievances. The imposition through the formal school system of a common language on a linguistically diverse population can, depending on how other languages are treated, serve to unite or divide a population. If the imposition, in intention or outcome, is an aggressive cultural act and allows little acknowledgment of other languages, then it is more likely to divide a nation than unite it: "Language is an essential element in the maintenance of ethnic and cultural identity and may be, in some cases, the only test for the existence of an indigenous people."¹¹⁰

Narrow worldviews

Worldview formation is the second reason why education and conflict are related. Schooling systems provide one important way of shaping individuals', and hence social groups', worldviews. Many other influences, such as families and the media, contribute to the framework of ideas and beliefs through which an individual interprets the world and interacts with it. But schooling is one such influence that is easily shaped by policy. It is much harder to legislate what families discuss in the privacy of their homes than what the content of the school curriculum covers.

The liberal notion of education is that "it changes people (beliefs, attitudes, behaviors) and that collectively this process changes society as a whole."¹¹¹ This is a powerful concept that has been used by numerous actors around the world to promote a particular ideological position or social or political perspective-for good or for ill. For example, the education system in Nazi Germany legitimized ideas, such as eugenics and the importance of an Aryan state, that were fundamental to Hitler's ability to perpetrate, with limited social resistance, genocide against Jews, gypsies and homosexuals.¹¹² A study of textbooks in Rwanda before the genocide also found evidence of incitement to violence, particularly between Tutsis and Hutus.¹¹³ Ideally, a strong school curriculum, the corresponding teaching and learning materials, and the style of teaching should help to broaden its students' outlook and increase tolerance for minority groups instead of the reverse.¹¹⁴

The notion that education broadens students' outlooks, making them more tolerant of others and less prone to extremist views, has been tested at the global level. A long tradition of research initiated by the renowned sociologist Seymour Martin Lipset has shown that poor education is associated with more extremist views, including authoritarianism, intolerance and prejudice.¹¹⁵ This proposition has been tested in recent global econometric analysis. One study finds that "less educated people tend to have more confidence in their nation's armed forces" and that "a percentage point increase in the population with high confidence in the army is associated with a percentage point increase in the risk of civil war, other things equal."¹¹⁶

A lack of citizenship skills

The third reason why education and militancy are related has to do with school-taught skills that can contribute to either waging war or waging peace. Political scientists have long examined the pacifying effect of education and schooling as a means of teaching basic political skills, such as the ability to pursue interests peacefully through the political process.¹¹⁷ They conclude that schools should aim to develop students' core competencies-such as literacy, numeracy and critical thinking-that can improve political analysis skills, as well as to teach age-appropriate, basic interpersonal conflict resolution techniques.

In this regard, recent evidence that terrorist recruits are typically not poor or uneducated but often highly schooled, especially in the technical sciences, may appear to undermine the argument that more schooling tends to instill skills that reduce the appeal of violence among youths.¹¹⁸ Indeed, this conventional wisdom does not take into account the content of what students are actually learning in school, which may make a significant difference. Scholars of Islamic terrorism and radicalism allege that many Islamists, especially international terrorist bombers and leaders, are recruited on the basis of their technical skill and sophistication, seemingly undermining the argument that school-taught skills actually reduce the incidence of militancy.¹¹⁹ Yet a deeper look at the reasons why engineers and graduates of technical programs may be overrepresented among leaders of Islamic extremist groups suggests that an underabundance rather than an overabundance of critical thinking skills renders these students more susceptible to violence. The British government recently found evidence that Islamic "extremists are known to target schools and colleges where young people may be very inquisitive but less challenging and more susceptible to extremist reasoning/arguments."¹²⁰ A recent in-depth study of "the engineers of jihad" finds that engineering students tend to suffer from two specific intellectual deficits, partly as a result of their narrow technical/vocational training: They are more likely to "treat ambivalence as illegitimate" and to repress "difference and dissent"; and on account of their mechanistic training, they are more prone to "seeing

history as shaped by the clash between good and evil, and conspiratorially ascribing the forces of evil to one identifiable foe."¹²¹ Though preliminary and subject to critique, this research does confirm the importance of critical thinking and citizenship skills in reducing the appeal of violent conflict.

Increased opportunities for recruitment

The fourth argument that is prevalent in the global econometric literature emphasizes the conditions under which waging violent conflict against the government becomes financially and militarily viable. In the words of Oxford University's Paul Collier, "In order to create and maintain a rebel organization, the rebels have to be paid and military equipment has to be purchased."¹²² Though, in most countries, there are some fringe groups willing to resort to violent conflict to achieve their political objectives, only in a small fraction of these cases do groups actually have the means to wage armed conflict. Education levels may be particularly important, to the extent that limited access can increase the pool of youths willing to take up arms. Collier postulates that as educational attainments rise, the potential income that recruits would have to forgo in order to join militants rises, making it less likely that violent conflict will occur. This of course assumes education translates into employment.

Recent examples that fit this explanation well include Sierra Leone, where survey data from that country's civil war indicate that most recruits were young and poor. The data from this conflict show that close to 80 percent of recruits to the rebellion had left school before they joined a rebel group, in part on account of school closings, as the country's infrastructure deteriorated before the war. One study concludes from this example that a lack of access to primary school is robustly correlated with recruitment into armed groups.¹²³

Conclusion

Understanding the reasons why education and conflict are often linked is important as an analytic framework, but also because it can point to specific target areas for policy and program response. Scholars in the education and fragility literature have taken great pains to illustrate that whereas education is frequently manipulated to foment conflict and extremism, the reverse is also true.¹²⁴ Education, if properly structured, can play an important role in peace building and nation building. Education systems that mitigate grievances, promote tolerant worldviews, instill good citizenship skills, broadly expand access to youth and transition them successfully to the world of work, are, according to this analysis, all reducing a society's risk of violent conflict. Indeed, this analysis provides strong grounds for examining the quality of education in addition to the question of access.

Given the four broad reasons why education may be linked to violence, what can we say about how these are playing out in Pakistan? Though we know from the global econometric literature that education most likely has some role to play in fostering militancy in Pakistan, we need to learn more about *how* specifically it does or does not affect support for militant violence in that country. Using the four arguments as to why education is associated with conflict risk as a framework, the following section assesses some of the specific mechanisms that appear to link education and conflict in Pakistan. The section is intended to provide more specific guidance to policymakers concerned with continued violence and instability in that country.

FIVE MECHANISMS: HOW EDUCATION CAN FUEL MILITANCY IN PAKISTAN

The four different approaches to why education is linked with conflict have guided our analysis of Pakistan's education context and help to identify specific educational mechanisms of concern. We make no claim to demonstrate any particular linkage, and we recognize that any causal relationship between the two is complex and subject to rigorous empirical analysis which remains largely absent. Yet in addition to showing that limited access is a risk factor, it is important to provide an explanation as to *why* the two may be linked in the specific context of Pakistan.

We suggest five mechanisms whereby Pakistan's education sector is contributing to militancy, over and above the role of a few militant madrasas. A review of evidence indicates that all five-either alone or in some combination-help explain why education and militancy are likely linked in Pakistan. The mechanisms we describe are meant to be used as a starting point, to be confirmed by further empirical research. Indeed there may be other mechanisms we have not included here. Some suggest, for instance, that higher education in Pakistan should be assessed in relation to militancy, but a dearth of reliable data has left this area largely unexamined.

The mechanisms we identify can serve as an organizing framework to conduct follow-on research and to devise conflict-sensitive policy strategies to support education reform in the country. They can also guide policymakers in prioritizing areas for education intervention. Clearly, each mechanism will vary by region, and with respect to different types of militant violence in Pakistan. The five mechanisms include:

- 1. Education management for political gain, which highlights important education-sector governance issues that appear to exacerbate core grievances.
- 2. Poor learning and citizenship skills development, which bring issues of education quality into sharp focus illustrating the extent to which key skills are not being cultivated.
- 3. *Fostering narrow worldviews*, which highlights aspects of curriculum and teaching that appear to support more promilitant outlooks.
- 4. Lack of relevance of schooling to the marketplace, which demonstrates the dangers associated with education systems that produce graduates with little relevant skills for available jobs.
- An inequitable provision of education, which describes the grievances inflamed by highly inequitable education systems.

All five mechanisms are associated in varying degrees with grievances, negative worldviews, lack of citizenship skills and recruitment opportunities. For each mechanism, one dimension is particularly salient, as summarized in table 3. It is useful to consider each mechanism in more detail.

Mechanism 1: Education management for political gain

Mismanagement, political manipulation and corruption in Pakistan's government education sector contribute to citizens' frustration and sense of exclusion, and ultimately exacerbate their grievances against the government. Education is one of the most visible, far-reaching and politically lucrative sectors, and any serious education management reforms will magnify the political and security gains of improving Pakistani governance. At more than 756,000, the number of public school teachers surpasses the number of ac-

Table 3: Relevance of Pakistan education mechanisms to different explanations of militancy

Pakistan Education Mechanism	Grievance	Skills	Opportunity	Worldview
Poor Governance	\checkmark			
Learning and Citizenship Skills		\checkmark		
Narrow Worldviews				\checkmark
Lack of Relevance to Labor Market			\checkmark	
Inequitable Access	\checkmark			

tive duty military personnel by more than 100,000; and the more than 140,000 public schools extend the government's presence to communities all across the country.¹²⁵ Yet expanding the public education system without addressing the serious management concerns could in theory do more harm than good by further inflaming core grievances.

Historically, Pakistan's own recurrent efforts at bureaucratic reform within education have made minimal progress largely due to a lack of political will. This has resulted in an education system that today is plagued with problems, including those related to teacher recruitment and management, ghost schools, and the "buying" of degrees. This severely affects both the quantity and quality of schooling, often limiting the impact of teacher training, and further frustrating the aspirations of the country's youth. Very recent initiatives offer a window of hope, however, and should be amply supported. As mentioned previously, the Pakistan Education Task Force has just begun to help the provincial governments implement the 2009 National Education Policy, and the recent constitutional reforms empower provinces in several education arena. Improving education-sector governance is one way among many of bolstering the stability of the Pakistani state-which, as expressed by the International Crisis Group, is of particular importance at this moment in time:

With citizens increasingly affected by conflict and militancy, including millions displaced by fighting in the Northwest Frontier Province and the Federally Administered Tribal Areas, the government's ability to ensure law and order and provide services such as education and health care will be vital to winning the hearts and minds of the public, and restoring links between the citizen and the state.... Both parties [PPP and PML-N] should resist the temptation to again use the bureaucracy for short-term political ends, which undermined its functioning. The government's inability to deliver basic services and good governance could provide an ambitious military leadership the opportunity to intervene.¹²⁶

Like other aspects of Pakistan's civil service, the government education bureaucracy has grown out of, rather than departed from, British colonial structures that were established with the very purpose of obscuring accountability and ensuring continuity of power by political elites. ¹²⁷ Under General Pervez Musharraf's leadership, attempts at reforming government bureaucracy, including devolving power from the national to the local level, has been largely ineffective. His appointment of 3,500 active and retired military personnel, some as leaders of civilian agencies, to monitor and assess civil servants served to further demoralize Pakistan's cadre of civil servants. One study concludes that "in public perceptions, the country's 2.4 million civil servants are widely seen as unresponsive and corrupt, and bureaucratic procedures cumbersome and exploitative."¹²⁸

To the detriment of Pakistan's public school students, teachers are often not hired on the basis of merit. Rather a strong culture of nepotism and favoritism on the part of political power brokers determines who receives a teaching job, in addition to outright bribery.¹²⁹ The recent National Education Policy of 2009, the Ministry's White Paper of 2007, and the government's 2004 Poverty Reduction Strategy Plan all acknowledge the problem of politicized teacher recruitment and management.¹³⁰ According to the White Paper, "Without meritocratic recruitments, transfers and postings, the failure of the [education] system is inevitable. The system functions mostly for the politically connected, the bulk of teachers remain a voiceless lot that survives in a structure that frequently disregards merit."¹³¹

Because the education sector is one of the most lucrative to manipulate, historically any political will for reform has been diffused by high incentives for shortterm political gain. The numerous teacher posts have often been used as rewards in Pakistan's system of patronage politics, with teaching jobs handed out as a reward for political support. Likewise, once employed, loyal teachers can be used to great effect towards ensuring continued political support. As some of the most educated members of their communities, especially in rural areas, teachers often are called upon to play a role in monitoring elections. Anita Ghulam Ali, who was Sindh's minister of education during Musharraf's 2002 presidential referendum, resigned her post over the issue of using teachers to rig election results. She explains:

I received on my desk a row of names of teachers who needed to be transferred. I was asked to sign the transfers. However, there were no reasons given, which is unusual. When I inquired about why these individuals were being transferred, I wasn't given a direct answer. . . . Eventually I discovered that the teachers were being transferred to positions where they would serve as polling agents so they could stuff the ballot for [Musharraf's] referendum.¹³²

Politicized teacher management negatively affects the quality of education and is further compounded by generally incoherent human resources management.¹³³ One multiyear district government study that examined factors affecting educational quality at the school level finds that,

over the past two years [of the study period], the lack of a coherent teacher policy can be observed. Shortage of teachers at the school level, resulting from transfers and other policies relating to appointment, retention, and replacement of teachers that are taken at the Provincial level, and over which the District has no control clearly have a negative impact on the learning levels of children. Teachers including Head Teachers are frequently transferred during the academic year disturbing the routine running of a school with students bearing the brunt of such measures... A teacher may be transferred at any time without a replacement which can leave a school with only one teacher for several months to a year.¹³⁴

The result is that many teachers are more accountable to the powerbrokers who appointed them or the provincial authorities who manage them than to students, parents, school administrators or communities. In public schools, teacher absenteeism is high, because there is often little sanction for missing work and the government monitoring system is quite weak.¹³⁵ One study found that during surprise visits to 30 government schools, 12 of them were closed, most commonly because teachers did not come to work. Within the remaining 17 schools that were open, onethird of all teachers were absent and several more were present but too indifferent, overwhelmed or incompetent to actually teach any lessons.¹³⁶

Surprisingly, some of the most highly paid and experienced teachers in the public education system are the most frequently absent. A recent study found that government schoolteachers with more than three years teaching experience are absent more than twice as often as teachers who have less than a year of teaching experience.¹³⁷ Therefore some teachers are able to collect regular salaries while spending their time at other jobs or residing elsewhere, even abroad. According to the ministry of education, some teachers, who are often referred to locally as "on visa," are "permanently absent."138 Understandably, incentives are strong to be appointed to or to "purchase" a teaching post, even if you have no interest or intention to actually teach. Anecdotally, the bribes paid for getting a teaching post are much higher for positions in rural villages in Khyber-Pakhtoonkhwa than for posts in its capital, Peshawar, presumably because in remote areas with lower levels of government monitoring, it is that much easier to go "on visa."¹³⁹

'Ghost schools,' as mentioned above, are another phenomenon related to corruption and teacher absenteeism. Again, such schools exist on paper but not in practice. Though the physical school building may be in place, absentee teachers pay a kick back (percentage of their salary) to education administrators and monitors who in turn falsify report about school functioning. The result is no functioning education service delivery associated with these schools.¹⁴⁰ The incidence of ghost schools is hard to assess; however, in 2004, when the Pakistani politician Imran Khan estimated the number of functioning schools in his constituency (the District of Mianwali in Punjab Province), concluding that "20 percent of those on the rolls did not exist at all, while 70 percent of those that did were semi-permanently closed."¹⁴¹

Teachers have been reported to make examination answers public days before the examination,142 and to accept payment for school admission and higher grades.¹⁴³ One household survey reports that half the respondents who had interactions with public school officials regarding admission or registration paid a bribe. In this survey, 37 percent of respondents felt they could get better education services if they paid a bribe.¹⁴⁴ In one instance, the Primary School Teachers Exam at the University of Sindh had to be postponed because the test answers were sold and published in a local newspaper.¹⁴⁵ More than 17,000 students who arrived for the exam were turned away minutes before it was to begin. Protests and sit-ins broke out, resulting in 25 people being injured when police tried to disperse the crowds.

Corruption, mismanagement and the mobilization of the education system for short-term political gain-especially through political teacher management and corruption-all erode citizens' trust in their government. Faith in the nation's religious schools is higher than in the public education system. In a British Council report, when youth are asked how much they trusted Pakistan's institutions, the military and religious educational institutes were trusted more than state-run education, the national education ministry and the public health systems.¹⁴⁶ Students complain about the culture of corruption that permeates the school system and undermines any hope of meritbased achievement. "There is no education," complains one student. "There is a culture of intercession and recommendations."¹⁴⁷ Another agreed, stating in a response to a survey: "Here, a student struggles day and night but the son of a rich man by giving money gets more marks than him. This curse has become widespread in society."¹⁴⁸ Another study found that "80 percent of young people feel males should be educated to secondary or university levels and 70 percent say females should be educated similarly."¹⁴⁹ A poorly governed education system is foiling the aspirations of Pakistan's youth.

Parents are also frustrated with government education options. In one survey, parents who did not send their children to school said it was because of poor education provision, with 36 percent citing poor quality and 26 percent citing long distances from home to school.¹⁵⁰ The LEAPS research shows that parents, even from poor and rural villages, can quite accurately assess the quality of their children's schooling. Without knowledge of a school's performance on tests or other metrics, parents in the study whose children attend schools with lower test scores consistently rank those schools worse than those with higher scores.¹⁵¹ Parents in the study also had a clear idea of the importance of teachers, versus school buildings or supplies, in providing a high-quality education. The majority of parents surveyed thought that schools without dedicated teachers but with very good infrastructure or free school supplies were "bad" or "very bad." Close to 80 percent of parents thought that those schools with poor infrastructure and no free school supplies but with dedicated teachers were "good" or "very aood."152

The disconnect between citizens' high demand for accessible high-quality schooling and the poor provision of education has created a strong perception, especially on the part of youth, that this supply gap is one source of the mounting violence in Pakistan. Twenty percent of youth surveyed by the British Council cited a "lack of education and awareness" as the main reason for violence in Pakistan. Injustice and poor economic conditions, also related to education, were each viewed by almost one-third of youth as the main reason for violence and terror.¹⁵³ Overall, only 10 percent of respondents had a "high level" of confidence in the national government, with most believing that the government has failed them on all counts.¹⁵⁴

"Ultimately," concludes one study, "a sustainable solution to bad governance in the education sector hinges on political will within the Pakistani government to fully address governance issues across the board."155 However, the international community must do its part to reinforce this potential opportunity to alter traditional political incentive structures. Governance concerns must be central to donor engagement with Pakistan, and the education sector should not be left out of this effort. Often, donor-led initiatives aimed at improving governance and reducing corruption ignore the education sector, instead focusing on other important areas such as justice and the rule of law. Poor governance within the public education system not only inflames citizens' grievances and erodes their trust; it also negatively affects the quality of education and is perhaps the single greatest obstacle to achieving needed education reforms.

Mechanism 2: Poor learning and citizenship skills development

Poor education management contributes to poor education outcomes. Indeed, by all accounts, those children who are in school struggle to adequately develop core skills, such as reading, writing and critical thinking. Even more disturbing are new data that conclusively demonstrate that low-performing government schools directly hinder the development of good citizenship skills. Many point out that poor mastery of literacy, numeracy and civic values, combined with high levels of illiteracy in the population, mean that core skills that can help mitigate extremism often fail to be imparted to pupils. With this perspective, focusing on improving learning outcomes is important not only in and of itself but also for promoting democracy and stability in Pakistan.

Primary school students are learning very little in Pakistan. In rural Pakistan, only two-thirds of students in grade 3 can subtract single-digit numbers, and only a small proportion can tell time or carry out simple multiplication and division.¹⁵⁶ Many students are not reaching the learning targets outlined in the national curriculum goals, nor are they learning the skills needed to function in a globalized world. In the worst-performing government schools, children cannot recognize letters or count numbers after three to five years of education.¹⁵⁷ Some of the most robust data on learning outcomes in Pakistan's schools come from the LEAPS study. Though other studies have highlighted the poor levels of learning in Pakistan,¹⁵⁸ the methods used by the LEAPS researchers have allowed them, over time, to pinpoint the factors causally related to mastery, or a lack of mastery, of core skills such as literacy and numeracy as well as assess the development of citizenship skills.

By far the most important factor determining a students' learning achievement is the type of school attended-private or public. This public/private gap is between 8 and 18 times larger than learning outcomes gaps associated with a host of other characteristics for which the study controlled, including students' socioeconomic background, students' gender, and whether or not the student's mother or father is literate.¹⁵⁹ The LEAPS researchers are quick to point out that it is not that every government school is worse than their private school counterparts. Indeed, they find that the quality of government schooling is guite varied, much more so than private schooling. In their study, the top-performing public schools are on par with the top private schools. However, the worstperforming government schools are generally much worse than the bad private schools. Other studies have also pointed out this variance, emphasizing the ability to find good as well as bad schools in the public sector.¹⁶⁰ However, there are strong data from Punjab Province to say that on average, private schooling is overwhelmingly better at helping students learn than government schools.

Findings from the LEAPS study shows that public school children need on average 1.5 to 2.5 years to catch up to their private school peers by Grade 3.¹⁶¹ In rural Pakistan, attending private school greatly increases students' test scores-by 0.82 standard deviations in English, 1.15 in Urdu and 1.11 in mathematics.¹⁶² If all students in Pakistan were learning math at the level of these students in private schools, it would reduce the United States / Pakistan achievement gap on internationally comparative math tests by two-thirds. This is a huge difference, and it is accomplished at less than half the cost per pupil compared with government schools.¹⁶³

In addition to generally learning very little, many children in primary school are not developing civic values. On average, fewer than half the students in the LEAPS study-from both public and private schools-answered the civic values questions in a way that would be considered reflective of "good citizenship."¹⁶⁴ Students in the study were asked basic questions about civic knowledge, dispositions and skills. Questions included basic geography and political structures, trust in government institutions, preference for democratic methods of decisionmaking, gender bias and basic intellectual reasoning skills.¹⁶⁵ For example, when asked how to decide what their class should eat for lunch, only 18 percent thought having students vote was the best way relative to handing the decision over to a central authority such as the teacher, the class monitor or the smartest student.¹⁶⁶

Again, private school students significantly outperform their public school counterparts, especially children enrolled in poor-performing public schools ranked in the bottom 25th percentile. Similar to learning outcomes, the data demonstrate that it is the school itself-not differences in things such as wealth, family background or teacher characteristics-that is the main reason private school students significantly outperformed their public school counterparts on civic values tests.¹⁶⁷ Noting that curriculum and textbooks are virtually the same in public and private schools, the researchers hypothesize that it is the whole school environment that accounts for the difference in civic values development. Private schools, compared with bad government schools, are much more likely to have teachers who regularly attend school, school management that is accountable to parents and students, flexible strategies for helping children address problems, better infrastructure and less corporal punishment.¹⁶⁸ Clearly, students learn from the behavior and social norms modeled for them at school, in addition to those modeled in the home.

However, by far one of the best predictors of good civic values for Pakistani students in the LEAPS study is high-quality learning in school.¹⁶⁹ The importance of literacy, numeracy and overall learning achievement for citizenship skills is apparent. These core skills are useful in part because they allow students to assess and cross-check political arguments, news reports and propaganda, as well as more actively participate in community life. Other studies outside Pakistan have also highlighted the relationship between cognitive development, including literacy and numeracy, and civic values.¹⁷⁰

People who cannot read or write also have access to limited information sources, which some have argued make them more vulnerable to manipulation by extremists. There is evidence that the Pakistani Taliban has attempted to do just this in Khyber-Pakhtoonkhwa. For instance, in the Swat Valley, the Taliban leader Mullah Qazi Fazlullah began using unlicensed FM stations to broadcast "Mullah Radio" in 2006. Fazlullah and his predecessors were attempting to exploit the fact that many people in the area lacked basic literacy skills and had limited access to diverse sources of information. Audiocassettes and DVDs containing pro-Taliban songs and scenes of alleged violence are also widely distributed in these areas.¹⁷¹ Citizens in the Swat Valley, and other areas of Khyber-Pakhtoonkhwa, rely heavily on audio sources for news. For example, in the 2009 survey of 4,000 men and women in the FATA, radio was found to be the source of information most valued by respondents (30 percent), followed by television (13 percent). In contrast, written news sources were valued by a much smaller percentage of the population. Only 12 percent of respondents said that newspapers were the source of information they valued most.

In conclusion, the quality of schooling in Pakistan is a vital part of supporting democratic development. Specifically, ensuring children are learning in school will go a long way to cultivating good citizenship skills and developing core capacities for mitigating extremism. The LEAPS study puts the spotlight squarely on the role of schools in this effort. Though the extent to which the study's findings mirror what is happening in other provinces besides Punjab remains to be seen, it is clear that poor-performing government schools are directly hindering the development of good civic values. In this sense, national stability and the quality of education are closely linked in Pakistan.

Mechanism 3: Fostering narrow worldviews

In addition to limiting high-quality learning and skills development, there is some evidence that government schools foster narrow worldviews among students, which predispose them to support violence as a means of redressing their grievances and disagreements. Related to the development of specific citizenship skills discussed above, worldview formation is a broader process of shaping the overall perspective from which young people see and interpret the world. The content of the school curriculum has long been critiqued by a select group of Pakistani scholars for developing narrow and intolerant worldviews among students. Over the years, much time and resources have been spent on revising Pakistan's national curriculum-but with little effect. Indeed, the latest curriculum review was completed in 2006, but it is still not in use in more Pakistani schools.¹⁷² Without subsequent changes to textbooks and-most important-teaching, curriculum changes remain words on a page in a government office.

Recent empirical research reviewed above gives some reason to be concerned about the role of schools in fostering intolerant worldviews. Christine Fair and others are puzzled at the results of their 6,000-person, nationally representative survey that demonstrate that Pakistanis with higher education are less supportive of the Afghan Taliban than less educated peers but were equally supportive of Kashmir-oriented militant organizations. Why would the 'education effect'-the theory that more education makes people less supportive of violence-hold for some militant groups and not others? As discussed above, the reason, they hypothesize, lies in the school curriculum, which they point out is rife with anti-India sentiments. Therefore, spending years in school is likely to cancel out any education effect gains in the area of Kashmiri militancy specifically.¹⁷³

These findings are consistent with earlier research done by the Pakistani scholar Tarig Rahman, who finds that while intolerance and sectarianism in Pakistan's madrasas runs high, public schools do not fare much better.¹⁷⁴ His study, based on surveys of students at different types of schools, shows that although the worldviews of students in madrasas tend to be the most radical and least tolerant, public school students exhibit similar tendencies, with students in elite English-medium private schools faring much better. When asked whether Pakistan "should take Kashmir away from India by open war," only 26 percent of children in private schools answered "yes," as compared with 40 percent of those in public schools, and 60 percent of madrasa students.¹⁷⁵ Likewise, when asked whether "Pakistan should take Kashmir away from India by supporting Jihadi groups to fight with the Indian army," 22 percent of private school students answered "yes," as compared with 33 percent of public school students and 53 percent of students enrolled in religious seminaries.¹⁷⁶ Though this study's methods can be critiqued-including its moderately small sample size that is far from nationally representative-the findings starkly highlight the issue of intolerant worldviews that sanction violence as a means of dispute resolution.

A number of Pakistani academics have over the years pointed to the curriculum as one of the main culprits for "children being educated into ways of thinking that makes them susceptible to a violent and exclusionary worldview open to "sectarianism and religious intolerance."¹⁷⁷ They are quick to note that the curriculum content has been sanctioned by the political agendas of successive ruling governments. In A Subtle Subversion: The State of Curricula and Textbooks in Pakistan, the editors A. H. Navyar and Ahmed Salim argue that from primary to tertiary levels and across a range of subjects, Pakistan's national curricula and associated textbooks promote a particular, and politically motivated, version of history, culture and society. It also privileges binary thinking over critical engagement with complex issues, generally reinforcing a narrow worldview. Deriving largely from General Zia's political objective of Islamization, but building on a long legacy of using the education system to inculcate fidelity to Pakistan, the content of curricula and textbooks from the mid-1980s to the mid-2000s heavily promoted an "ideology of Pakistan," described by scholars as a "national narrative" of Pakistan as an Islamic state under threat from a hostile India.¹⁷⁸ In the words of one prominent education scholar, "1959 may have been the last time an education policy was driven by education, not by politics. After 1965, education, patriotism, nationalism and dogma became synonymous."179

In these curricula and textbooks, historical facts are altered and whole epochs are omitted, all with the aim of securing a strong national identity and allegiance to the state. Hatred toward India and Hindus in particular is prominent in the curricula and textbooks used across schools today. For example, the curriculum for Class V Social Studies prescribes a learning objective of, "to understand the Hindu and Muslim differences and the resultant need for Pakistan," which it translates in textbooks using homogenizing stereotypes depicting Muslims as "good," "enlightened" and "peaceful" and Hindus as "bad," "violent" and "cunning." For example, an excerpt from a social studies text reads:

The Hindus always desired to crush the Muslims as a nation. Several attempts were made by the Hindus to erase the Muslim culture and civilization. Hindi-Urdu controversy, shudhi and sanghtan movements are the most glaring examples of the ignoble Hindu mentality.¹⁸⁰

The democratically elected president Zulfigar Ali Bhutto introduced a full two-year course on the "Fundamentals of War" and the "Defence of Pakistan" for secondary school in the 1970s.¹⁸¹ Here glorification of the military and violence was seen as a strategy to defend Pakistan against an aggressive India. Military science is an important part of the curricula and textbooks at the secondary level, covering topics such as the causes of war, the conduct of war, modern weapons systems, military operations, the ethics of war, Pakistan's defense problems, Pakistan's defense forces and foreign policy, and the role of armed forces during peacetime. A review of Pakistani heroes covered in textbooks shows the majority to be from the military, with biographies describing in great detail the battles they have fought. Pictures and lesson examples are also heavily militarized in textbooks.¹⁸²

Although it is clear that the content of the curriculum is in many ways antithetical to a "progressive, moderate and democratic Pakistan,"¹⁸³ questions remain about the extent to which the curriculum shapes students' worldviews. There is debate over the role of teachers' own worldviews in mediating the curriculum content. Rahman shows differences across government, public and private schools among teachers' own attitudes toward using violence in the Kashmir case.¹⁸⁴ There are also accounts of teacher education institutions, some of which supply the bulk of public

school teachers in Punjab, being captured by very ideologically conservative interests.¹⁸⁵ However, as seen above, the recent LEAPS study findings found that in relation to civic values, teachers' own ideological perspectives did not have an impact on students' skill development. One could argue that the difference can be explained because the Rahman and the LEAPS research looked at different metrics-one asking students and teachers questions directly about support for violence and the other not. They also looked at different sets of private schools, with Andrabai and others studying low-cost Urdu-medium private schools that used that government curriculum and Rahman reviewing elite English-medium schools that use an alternative curriculum, which has been shown to have less anti-India content.¹⁸⁶

It is clear, however, that the curriculum is only part of the story. The LEAPS study demonstrates that despite using the same government curriculum, students in public schools and Urdu-medium private schools are developing different civic values because of their schooling experience. Perhaps a more fruitful line of inquiry is to look at teachers' style of teaching, which vary widely between private and public schools. Pakistani scholars, such as Pervez Hoodbhoy, argue that many teachers in public schools use rote learning methods, asking students to memorize and recite lessons out loud and copy verbatim in their notebooks lessons written on the blackboard.¹⁸⁷ Rahman himself comments on this, saying that "any originality, any questioning of given facts, any deviation from the traditional interpretation is frowned upon and sometimes punished."188 An "authoritarian" teaching style, as this method is often called in the United States, includes teaching methods that close down rather than open up discussion and discourage rather than encourage questioning. This type of teaching method does little to help students critically reflect upon the topic discussed but rather reinforces notions of one right way

to interpret the world. Indeed, this might be why, in the LEAPS study, the vast majority of students did not opt for "voting" but rather turning decisions over to the teacher or other authority when choosing the best way for the class to decide what to eat for lunch.

Research in the U.K. on educating against extremism has also found that teachers' pedagogy plays a crucial role in mitigating extremist worldviews and recommends a range of strategies around listening, open discussion and practicing critical discourse.¹⁸⁹ The characteristics of a worldview that supports rather than challenges extremist ideology have been the subject of much recent debate. An "extremist" worldview is one, in the words of Desmond Tutu, that does not "allow for a different point of view" and encourages one to "hold your view as being quite exclusive, when you don't allow for the possibility of difference."190 Scholars examining extremism in education describe the promotion of certainty, binary ways of thinking, and objectifying the "other" as well as the removal of ambiguity, self-doubt and critical reflection as ways in which educational processes can make students more susceptible to extremism.¹⁹¹ Psychologists talk about "cognitive closure" and the desire for a definitive answer as some of the ways a narrow worldview is sustained. Such narrow worldviews allow people to see and interpret the world through simple dualisms (e.g., right and wrong, black and white, like me and different from me). Some argue that such thinking can help people feel safer when navigating the frequently complex and shifting social realities that many communities face.¹⁹² All of this makes people more susceptible to supporting and engaging in militancy.

Mechanism 4: Lack of relevance of schooling to the marketplace

A second source of education-related grievances is the frustration that results when poor-quality

education that is of little relevance to the existing labor market impedes youth employment. Though official unemployment in Pakistan stands at around 8 percent, 70 percent of employment is in the informal sector, and underemployment among youths is widespread. Pakistani youths' employment outlook could get worse before it gets better. Though the last decade witnessed steady economic growth, in 2009 the growth of gross domestic product is estimated to have slowed down to 2 percent. And yet economic models suggest that the economy would need to grow by an estimated 6 percent a year in order to deliver the 36 million new jobs that are needed over the next 10 years, given the nation's steep population growth rates.

The education system produces many unemployable youths with few skills for economic survival. According to one senior Pakistani policymaker, "There is a serious mismatch between the jobs demanded by the emerging needs of the economy and the supply of skills and trained manpower in the country."¹⁹³ Job growth is in areas such as telecommunications, information technology, financial services, oil and gas exploration and engineering.¹⁹⁴ The education system is geared toward preparing students to work in the public sector, such as federal and provincial government ministries, and is failing to adequately give students the skills needed to find employment in the expanding private sector. Technical and vocational training institutions have also been slow to adjust. According to the Ministry of Education, increased partnership with growing industries is needed to ensure that education makes a shift from preparing students for a "closely protected, public-sector economy to a globally integrated, private-sector-led economy."195

The poor status of education is turning out a generation of "frustrated achievers" who resent not being qualified to find work. A recent survey of Pakistani youth in both rural and urban areas finds that the percentage who are neither in school nor working in the 16 to 24 age group has risen in recent years, suggesting challenges in their transition into the workforce.¹⁹⁶ When asked whether they would like to work, "almost all (98 percent) nonworking males in the [20 to 24 year-old] cohort and 93 percent in the [15 to 19] cohort said they would work if given the opportunity." Twenty-seven percent of males are not working but would like to work, whereas 50 percent of female youth are not working but would like to.

In a recent survey of Pakistani youth, half the students say that they believe they lack the skills necessary to compete in today's labor market.¹⁹⁷ Many young people express their fears about their ability to find employment, and they believe there are too few jobs available and that their prospects are getting worse, not better. One complains that "if you have an MA or an MBA you do not get a job. People are roaming around with degrees in their hands." The absence of skills relevant to the 21st-century labor market can give rise to frustration, as well as despair and alienation. In Kashmir, there are reports that unemployed youths who joined militants "found an occupation and ideology, and a new family in which they found bonding and brotherhood. They had motivation, dedication and direction" as a result of joining a militant group.¹⁹⁸

Such grievances are not a sufficient cause of militancy in Pakistan, but conflict analysts agree that these contribute to conflict risk in poor countries such as Pakistan. For this reason, one Pakistan education specialist concludes that the poor quality and limited availability of schooling in Pakistan, particularly public schools, should be seen as bearing a much greater responsibility for the rise and continuation of militancy in Pakistan.¹⁹⁹

Mechanism 5: The inequitable provision of education

Pakistan's education supply gap is highly inequitable. This lack of attention from the government–which is felt most acutely by citizens who are poor, rural and non-Urdu speakers–only serves to exacerbate feelings of frustration and exclusion. In the past, an inequitable provision of education has inflamed antigovernment grievances, even resulting in violence in places such as the FATA and Balochistan. Understanding who is left out of education requires a nuanced parsing of the data and is important for guiding policies and interventions that hope to successfully address this issue.

In the education sector, one of the main reasons for citizen dissatisfaction is that the government has systematically ensured, over generations, that Pakistan's landed and governing elite have access to high-quality schooling whereas the rest of the populous does not. Indeed, some of the best schools in the country are the primary, secondary and higher education institutions for the children of military personnel.²⁰⁰ Private foundations, which receive ongoing funding from the many military-owned corporations, run the schools. The government, through a rather convoluted set of relationships, subsidizes these schools. It does so both by paying the sitting and retired military personnel who teach at the facilities and also by the various, initial and ongoing investments in the military's corporations.²⁰¹ Children of nonmilitary personnel can access the schools for a much higher fee if there is space after the others are enrolled. This is one important way in which the privilege of the current ruling class is ensured across generations.

In contrast, the provision of government schooling to many in Pakistan has been quite limited. If one closely examines the data on who does and who does not have access to education, one sees a stark picture of patches of extreme educational deprivation. One way to measure equity in education is to examine education poverty levels between groups. Education poverty is measured by the percentage of citizens who have less than four years of education, which is the globally estimated length of time needed to acquire basic literacy and numeracy skills.²⁰²

The recent *Education for All-Global Monitoring Report* 2010 examines education poverty for Pakistanis age 17 to 22 and demonstrates that by far the biggest divide is between the poor and the rich. The wealthiest quintile of the population between ages 17 and 22 experiences only 9 percent education poverty, while the poorest quintile experiences 68 percent, a massive 59-point difference. Nationwide, children from families in the richest third of the population scored on average between 0.25 and 0.50 of a standard deviation higher than children from the poorest households.²⁰³

Citizens' native language is another factor associated with deep educational inequities. Only 11 percent of the native Urdu-speaking population experiences education poverty, compared with 25 percent of Punjabi speakers, 43 percent of Pushto speakers, 50 percent of Sindhi speakers, and 54 percent of Balochi speakers. Whether Pakistanis are living in urban or rural areas or are male or female also influences their ability to access education. On average, 42 percent of females experience education poverty, compared with 26 percent of males and approximately 20 percent of urban citizens, and compared with 44 percent of rural citizens. In combination, these factors can result in even larger inequities, with poor rural girls from Balochistan being some of the least educated segments of society.

Literacy Rates (10 years and older), according 2007-2008 Social Living Standards Survey	to Male	Female	Total	
OVERALL	69%	44%	56%	
Punjab	70%	48%	59%	
Sindh	69%	42%	56%	
NWFP	68%	33%	49%	
Balochistan	66%	23%	46%	
FATA*	30%	3%	17%	

Source: Pakistan Federal Bureau of Statistics, "Pakistan Social and Living Standards Measurement Survey 2007-2008" (Islamabad, Pakistan).

* Data for FATA are from Pakistan Ministry of Economic Affairs and Statistics, "1998-Census"

The lack of education and resulting illiteracy and skills deprivation are a major concern for Pakistanis, many of whom believe that illiteracy makes people more susceptible to extremism. This is especially so in regions hard hit by violence, such as the FATA. In 2007, a survey of more than 1,000 adults in the FATA conducted by the Community Appraisal & Motivation Programme found that 45 percent of those surveyed believed that illiteracy was the cause of religious extremism.²⁰⁴ Two years later, a 2009 survey of 4,000 adults in the FATA found that concern over ignorance and a lack of education featured prominently in explanations of the causes of violence. When asked what is to blame for the high rates of suicide bombing in Pakistan, respondents answered Western influence (34 percent), a lack of employment (17 percent), ignorance (17 percent) and lack of education (17 percent).²⁰⁵ Indeed, many feel that without basic reading, writing and numeracy skills, there are few opportunities for active citizenship, improved health, adequate livelihoods and gender equality.²⁰⁶

These relative education disparities fuel grievances among groups traditionally left out or marginalized

by Pakistan's successive regimes. Such grievances are consistent with historical cases, in which militancy in Pakistan has been linked to the education sector. In the late 1980s and 1990s, violence perpetrated by the Muttahida Qaumi Movement in Karachi originated in grievances associated with discrimination against "Muhajir" Muslim immigrants in the admissions process to some schools. The dearth of high-quality public education provision in Balochistan, where rates of education deprivation and marginalization are highest, has knock-on effects, reducing employment opportunities for Balochis such that even government positions within their own province are largely filled by civil servants from Punjab and other provinces.²⁰⁷ This has fueled a backlash-so today in Balochistan, "outsiders" from other parts of Pakistan are targeted for killing.

Scholars from the global education and fragility literature explain that "because education has increasingly become a highly valued commodity, its unequal allocation has been a serious source of friction that has frequently led to confrontation. . . . It also shows how the powers of the state can become "ethnicized," that

is, used to advance the interests of one group over another."²⁰⁸ This is certainly the case in Balochistan, where unequal public education provision, especially compared with some other provinces, exacerbates long-standing grievances and sectarian violence.

Pakistan's inequitable provision of education to its citizens is clearly creating and inflaming grievances that appear consistent with what scholars in the global econometric literature on conflict often describe as the "disgruntled citizen" hypothesis. In Pakistan, dissatisfaction with the government and its performance runs high in general–and is increasing. Nine out of 10 Pakistanis currently say they are "dissatisfied with the way things are going in their country," up significantly from 2007. Forty percent say their government is having a positive impact on the way things are going, while 53 percent say it is not having a positive influence. By contrast, in 2002, 7 in 10 said their government was having a beneficial impact.²⁰⁹ Failing to address the problems of inequitable education access will only add to the ranks of disgruntled citizens. Conversely, real efforts to engage the marginalized in high-quality education opportunities may help mitigate these core grievances and contribute to greater stability in Pakistan.

KEY FINDINGS

s a new decade dawns, there is an important window of opportunity for Pakistan and the international community to prioritize education reforms that can bolster stability and peaces. This report reviews the connections between education and militancy in Pakistan, in view of stimulating debate and informing policy in the Pakistani government and civil society, as well as the international community. The report seeks to show how education can be a powerful engine for mitigating violence. Although large gaps in existing data on education and militancy in Pakistan remain, this study is intended to help spur debate around this issue and to encourage security experts and education specialists to engage in a more constructive dialogue concerning what are the most ffective strategies for improving conditions in Pakistan. The following summary of the report's main argument is intended to facilitate further reflection and engagement:

Finding 1: Demand for education within Pakistan far exceeds the government's ability to provide it. The reasons that large numbers of children and young people are not accessing education have less to do with factors like household poverty, the opportunity cost of sending children to school rather than to work or negative attitudes about sending children to school. Instead, the government's failure to provide access to high-quality schooling across diverse segments of Pakistani society is primarily to blame.

Finding 2: Contrary to popular belief, madrasas have not risen to fill the gap in public education supply and have not been one of the primary causes of the recent rise in militancy. The few madrasas that directly radicalize or train militant recruits pose a significant security concern, particularly in the tribal belt. However, the argument that madrasas represent the main or only education-related security challenge in Pakistan rests on three fallacies: exaggeration of the number of madrasas that actually educate Pakistani children; the assumption that children and their families choose madrasas only as schools of last resort; and the assumption that enrollment in madrasas necessarily increases the propensity for youth to join militant groups. The available empirical data does not justify any of these claims, although significantly more research is urgently needed.

Finding 3: Beyond madrasas, the education supply gap in and of itself likely increases the risk of conflict in low-income countries, including in Pakistan, highlighting the importance of expanding educational access. Scholars have established that irrespective of poverty levels, education is a significant risk factor associated with conflict. Few countries in the world better fit the profile of a country at risk of conflict on account of low educational attainments than Pakistan. Though low education attainment combines with many other factors to support a culture of violence, policymakers can be sufficiently confident that increasing access to education in Pakistan will help reduce the risk of conflict and will ultimately mitigate militancy.

Finding 4: A nuanced analysis of the mechanisms whereby education may exacerbate conflict risk suggests that in addition to access, education quality and content may be just as important for promoting stability. Global lessons learned about how education bears on conflict risk include explanations based on citizen's grievances, hindering citizenship skills, cultivating narrow worldviews and providing opportunities for militant recruitment. These explanations resonate in the Pakistani context, where five broad observations can be made about specific education mechanisms that influence militancy in Pakistan.

Finding 5: Poor education-sector governance creates huge discrepancies in the public education system, inflaming citizens' grievances against the government. Education in Pakistan is one of the most visible, far-reaching and politically lucrative government services. Poor governance within the public education system, especially in relation to teacher management and corruption, not only inflames citizens' grievances and erodes their trust. It also negatively affects the quality of education and is perhaps the single greatest obstacle to achieving needed education reforms. Further expanding public education without addressing the serious management concerns could in theory do more harm than good by further inflaming core grievances.

Finding 6: Poor learning outcomes hinder the development of the core skills, including those related to good citizenship, that are needed to help mitigate extremism. Primary school students are learning very little in Pakistan, and they are struggling to adequately develop core skills, such as reading ,writing and critical thinking. New data conclusively demonstrate that low-performing government schools directly hinder the development of good citizenship skills. Improving the quality of education is imperative for promoting peace and stability in Pakistan.

Finding 7: The curriculum and teaching in government schools help create intolerant worldviews among students. Pakistani scholars have for years criticized the government curriculum, especially for its heavily militaristic, anti-India content. Recent empirical research suggests that the teaching of this curriculum is associated with beliefs that condone Kashmir-related militant violence. Considerable efforts have been dedicated to curriculum reform, with as yet little impact in the classroom. Addressing the content of what is taught in schools, especially through an increased focus on teaching pedagogy, is an important way to contribute to a culture of peace in Pakistan.

Finding 8: Schools do little to prepare students for the labor market, frustrating young achievers and increasing the pool of possible militant recruits. Low-skilled graduates are increasingly finding that their education has not given them the ability to successfully compete in the labor market, especially in the private sector, where job growth in concentrated. These frustrated achievers are especially aggrieved at the government, expanding the pool of potential recruits for militants.

Finding 9: Education provision is highly inequitable, exacerbating grievances by those left out of the system. Pakistan's education supply gap is highly inequitable. This lack of attention from the government-which is felt most acutely by citizens who are poor, rural and non-Urdu speakers-only serves to exacerbate their feelings of frustration and exclusion. In the past, the inequitable provision of education has inflamed antigovernment grievances, resulting in violence in places such as the FATA and Balochistan. A nuanced approach to redressing equity is needed to mitigate long-standing grievances.

POLICY IMPLICATIONS

A wide range of actors are currently actively engaged in education and security reform in Pakistan. In concluding this report, we offer 13 recommendations in view of sparking increased debate over how education reform can mitigate militancy and support Pakistan's long-term stability:

- Harness the power of education to mitigate militancy and promote stability. Education should be recognized and prioritized by the Pakistani government and international donors as a powerful complement to existing security interventions. It is one arena that can be directly addressed through policy and programming. There are enough data to merit considerable attention to and careful consideration of education as one important piece of any successful strategy for peace. The Pakistani Government in particular should fulfill its pledge to increase domestic spending on education. Security experts and officials should not overlook education as an important tool in a strategy to create sustainable security in Pakistan.
- 2. Shut down militant madrasas, and treat this as a law and order challenge-not education policy. The small minority of militant madrasas should be seen as an obstacle to law and order in Pakistan and addressed as such. These specific institutions are not the purview of education policy.
- 3. Leave Islam out of it. Islam features prominently in the cultural and educational fabric of Pakistan. Islamic instruction is highly valued for its moral and ethical worth by large majorities of the population. Questions concerning the role of Islam in the national curriculum and in government schooling should be left to Pakistanis to debate. Religious seminaries that are not militant should be treated with respect and not conflated with militant seminaries. Any attempt by foreign, especially Western, powers including aid donors to invest in 'secularizing' Pakistan's schooling would likely be received poorly and backfire.
- Reform public education-sector governance. The education sector should be included in good gov-

ernance initiatives, along with other areas such as the rule of law and justice. Reforming how the public education sector is managed is perhaps the single most important priority, because without it citizens' grievances will continue over the shortand medium-term, impeding lasting change. Even if access expands over the short term, the potential benefits will be undercut by community frustration at mismanagement and corruption. Any existing good education governance efforts should be amply supported. Examples of these include: Pakistani civil society initiatives, such as the independent tracking of federal and provincial education budgets by the Institute for Social and Policy Sciences; and international donor and Pakistani government efforts, such as the Pakistan Education Task Force, a joint effort of the Ministry of Education and the U.K. government, which is helping provinces develop systems to implement the 2009 National Education Policy.

- 5. Focus on increasing the supply of high-quality schooling for all children rather than incentivizing demand for education. Although demand-side barriers certainly do exist, especially for the poorest children and for girls in many parts of the country, the major barrier to tackle is the problem of limited supply. Government service delivery should not be seen as the only option. Instead, creative strategies to increase the supply of high-quality schools should be supported, including public-private partnerships. For example, current efforts to explore the public financing of privately delivered, community-based schooling and the feasibility of vouchers should be actively pursued.
- 6. Expand access to education and improve student performance. The Pakistani government and international actors should prioritize the quality of education alongside efforts at improving school access. Though expanding government provision of education is an important strategy in reducing the risk of conflict, the benefits are likely to be limited if schools and their students continue to underperform. School construction may be a necessary, but it is not a sufficient, approach. Donors and stakeholders within Pakistan should place much

greater emphasis on educational outcomes than has been the case to date.

- 7. Prioritize the worst-performing government schools, specifically the bottom 25 percent, for more immediate impact. Although the best government schools perform on par with the best private schools, the lowest-performing government schools are having a disproportionally negative impact on Pakistan's children. Not only do these children learn very little in the way of core skills skills, but they are being exposed to environments that directly cultivate poor civic values. One important way for education policymakers to maximize security returns is to target quality in the worstperforming government schools. This could be an important priority for the Pakistan Education Task Force.
- 8. Emphasize teacher accountability over teacher training. The accountability of teachers to students, school administrators and parents should be maximized, especially in public schools. This is crucial not only to ensure better educational outcomes but also to mitigate constituents' frustrations. Though training is certainly important, improved professional development is undercut by absenteeism. Teacher training appears to have limited educational benefit absent local accountability structures. Emphasis should be on accountability, not increased certification or standardization.
- 9. Pursue short-term strategies for improving literacy, numeracy and critical thinking. These core skills are critical for good citizenship, and educational strategies exist to quickly-even within months-improve reading and writing. Rapid learning approaches should be explored, both for students in school but also for those out of school. The Pakistani government could learn from successful programs in other countries-and international donors could facilitate.
- 10. Address teaching as well as curriculum reform. It would be a waste of resources to continue to invest heavily in curriculum development without also addressing how new curricula will make it into the

classroom. The worldviews of students are strongly shaped by teaching. A focus on improving pedagogical approaches, including more interactive strategies that foster critical analysis and questioning, is just as important as revising curricula.

- 11. Improve access to and the job relevance of postprimary schooling. It is important for Pakistan's youth to be enrolled in greater numbers in educational activities, including but not limited to secondary school. However, the benefits to security will be limited if the skills youth are developing are not relevant to today's job market. Current initiatives to both improve the quality of schooling and to better align core skills with private-sector job growth should be supported.
- 12. Use creative approaches to expanding access to the chronically underserved. Segments of the population that have been systematically left out of the education system should be given the opportunity to learn. A new approach is needed to ensure more equitable education provision, one that especially prioritizes poor, rural, and non-Urdu-speaking citizens. To achieve this, creative and flexible approaches will be key. Current bold efforts, such as community-based girls' schooling in Balochistan initiated by civil society groups, should be fully supported and given renewed attention.
- 13. Gather better empirical data on the relationship between education and militancy in Pakistan. There has not been any significant, rigorous empirical research on the relationship between education and militancy in Pakistan. In this review, we have found enough evidence to warrant giving considerably more attention to the issue. Yet policy implementation and program design could benefit significantly from better empirical data. This large data gap would be easy to fill, given a number of excellent Pakistani research institutes. Relatively limited funds would go a long way toward filling this important knowledge gap. This research could also help international donors to ensure that their aid dollars are maximally effective and at the very least, not doing more harm than good.

A NOTE ON THE DATA

Much of this report would not have been possible without recent evidence-based research on education in Pakistan, and on the link between education and militancy in Pakistan and beyond. Several bodies of literature in particular are useful guides for informing analysis and policy, and should be highlighted. These include:

- Evidence-based studies on the prevalence of madrasas. Several recent analyses have sought to estimate the number of madrasas, as well as enrollment in madrasas as a percentage of total primary and secondary school enrollment. Current estimates are based on solid empirical methods and are consistent with each other, suggesting that the findings are robust, if not definitive. The seminal references to date are:
 - International Crisis Group, Madrassas, Extremism, and the Military, ICG Asia Report 36, (Brussels: International Crisis Group, 2002; revised 2005).
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- Survey research on Pakistani schools, parental preferences and school performance. Survey research on enrollment in different types of schools, as well as on parental and student attitudes toward schools, and even on the quality of schooling and

learning outcomes, has proliferated in recent years. Though there is still room for improvement in the data, these data are extremely helpful and provide valuable reading for policy planners and programming. This research is helpful in that it allows us to open the black box of national education in Pakistan and to explore the reasons for the low educational attainment rates and learning outcomes. It should be noted that of the empirical data on this subject, the LEAPS study is the most robust and because of its longitudinal nature, the researchers are beginning to develop causal evidence, something which most other studies used do not do. There are data limitations, however, especially as concerns the representativeness of the surveys. There is a need for additional research that builds on these studies and seeks to extend the findings to more provinces and population groups in Pakistan. The key surveys include:

- Tahir Andrabi, Jishnu Das, Asim Ijaz Khwaja, Tara Vishwanath and Tristan Zajonc, Pakistan: Learning and Educational Achievements in Punjab Schools (Lahore: Learning and Educational Achievements in Punjab Schools-LEAPS, 2007).
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- Global econometric research on education and conflict risk. Paralleling these new studies on Pakistan's schools, a new strand of econometric work on the root causes of conflict provides compelling confir-

mation that weak education systems represent a security liability for countries. A consensus is growing on this connection, but it remains largely at the level of establishing a correlation, rather than causation. The data used tend to be coarse and allow little fine-grain analysis of the reasons why low educational attainment contributes to conflict risk, or how the quality of education factors in. Two useful studies are

- Jeffrey Dixon, "What Causes Civil Wars? Integrating Quantitative Research Findings," International Studies Review 11, no. 4 (2009): 707-35.
- Clayton Thyne, "ABC's, 123's, and the Golden Rule: The Pacifying Effect of Education on Civil War, 1980-1999," *International Studies Quarterly* 50, no.4 (2006): 733-54.
- Research on the background of militants in Pakistan. Studies on this question are sorely lacking. For now, one of the few reliable analyses is the work of Christine Fair, including
 - Christine Fair, The Madrasa Challenge: Militancy and Religious Education in Pakistan (Washington: U.S. Institute of Peace, 2008).

- Survey research on attitudes toward militancy in Pakistan. Efforts to evaluate public attitudes toward militancy and particular militant groups in Pakistan has made important progress. A number of international polling organizations have also looked into this question, but much of the data is marred by problems with methods. Studies that have sought to overcome these research challenges and provide an accurate picture of support for militancy include:
 - Jacob N. Shapiro and Christine Fair, "Understanding Support for Islamist Militancy in Pakistan," *International Security* 34, issue 3 (Winter 2009-10): 79-118.
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