

Christian-Muslim Relations in the Shadow of Conflict: Insights from Kaduna, Nigeria*

Alexandra Scacco

Shana S. Warren

Senior Research Fellow
WZB Berlin Social Science Center
Reichpietschufer 50
10785 Berlin, Germany
alex.scacco@wzb.eu

Research Scientist
Innovations for Poverty Action
1440 G St. NW, Suite 9142
Washington, DC 20005-2001
swarren@poverty-action.org

March 14, 2021

*The United States Institute of Peace (USIP) and the New York University Research Challenge Fund (URCF) provided funding for this study. This research was approved via NYU IRB Protocol 14-9985. We are grateful to Chantal Pezold for research assistance. All errors and omissions are our own.

Abstract

In February 2000, large-scale Christian-Muslim riots shook the Nigerian city of Kaduna, killing thousands of people, and displacing tens of thousands more. Drawing on original survey data from a random sample of 300 young men living in particularly conflict-prone neighborhoods in Kaduna, we analyze patterns of Christian-Muslim relations fifteen years after the February 2000 crisis. In this chapter, we argue that local exposure to deadly intergroup violence continues to have profoundly negative effects on intergroup relations nearly two decades later. Kaduna residents on either side of the religious divide continue to exhibit high levels of mistrust and prejudice against members of the religious outgroup, and demonstrate substantial outgroup discrimination in behavioral games with real material stakes. We highlight three interrelated consequences of exposure to large-scale episodes of intercommunal violence, each of which complicates post-conflict reconciliation: (1) the erosion of intergroup trust, (2) the tendency that the violence increases local residential segregation along communal lines, and (3) lasting psychological effects. We offer micro-level evidence on each of these consequences from the Nigerian context, and caution against expectations that post-conflict communities should quickly bounce back from large-scale interreligious violence.

Keywords: interreligious violence, intergroup violence, intergroup relations, Christian-Muslim relations, post-conflict reconciliation, religion, segregation, Kaduna, Nigeria.

In February 2000, large-scale Christian-Muslim riots shook the Nigerian city of Kaduna, killing at least three thousand people, and displacing tens of thousands more. In the course of four days of the most serious interreligious violence Nigeria had ever witnessed, dozens of churches, mosques, and entire city blocks were burned to the ground. Drawing on original survey data from a random sample of 300 young men living in particularly conflict-prone neighborhoods in Kaduna, we analyze patterns of Christian-Muslim relations fifteen years after the February 2000 crisis. In this chapter, we build a case that, contrary to recent literature that points to relatively quick post-conflict recovery and documents a positive relationship between violence exposure and within-group pro-social behavior (e.g. Blattman 2009; Voors et al. 2012; Gilligan et al. 2014; Bauer et al. 2016), local exposure to deadly intergroup violence continues to have profoundly negative social and political effects on intergroup relations nearly two decades later.

We show that Kaduna residents on either side of the religious divide continue to exhibit high levels of mistrust and prejudice against members of the religious outgroup, and demonstrate substantial discrimination against members of the religious outgroup in behavioral games with real material stakes. We highlight three lasting consequences of exposure to intercommunal violence, each of which complicates post-conflict reconciliation.

First, deadly intercommunal violence erodes intergroup trust, and heightens perceptions of the outgroup as threatening and dangerous. This increases the likelihood of further episodes of violence. Second, intercommunal violence on a large scale tends to increase residential segregation at the local level, as people become afraid to live near outgroup communities. At the same time, outgroup communities do not disappear entirely – they often continue to coexist but occupy separate spaces within the same locality. We follow others (e.g. Enos 2017; Enos and Celaya 2018; Weiss 2020) in suggesting that mixed but segregated cities are particularly likely to suffer from high levels of intergroup prejudice and discrimination, making post-conflict reconciliation and recovery more difficult.

Third, exposure to violence can have long-term psychological consequences. Simply put, exposure to intercommunal violence traumatizes populations. We draw on secondary literature documenting high levels of post-traumatic stress disorder (PTSD) in Kaduna and Jos – the cities in Nigeria’s Middle Belt that have experienced the most frequent and deadly episodes of communal violence. Taken together, these consequences of violence exposure should lead us, on balance, to expect relatively slow, halting progress toward post-conflict recovery. We offer evidence on each of these consequences from the Nigerian context, and caution against expectations that post-conflict communities should quickly bounce back from episodes of interreligious violence.

Our data affords us a detailed view of the nature of Christian-Muslims relations in Kaduna, fifteen years after deadly intergroup conflict. Although intergroup attitudes are not uniformly negative, a picture clearly emerges of lingering mistrust, antagonism, and anxiety in intergroup relations. We are not arguing that Christian-Muslim violence is inevitable — in fact, it remains relatively rare, even in the religiously mixed cities of Nigeria’s Middle Belt region. Nor are we arguing that post-conflict reconciliation and recovery are impossible. We simply urge caution against expectations that communities can easily and quickly bounce back from violent conflict.

Long-term impacts of intercommunal violence

Reviewing recent empirical work on the consequences of exposure to violent conflict, the casual reader might be tempted to conclude that, while initially devastating in terms of lost lives and property destroyed, the dark side of violence exposure casts a short shadow. A series of high-quality (and high-profile) studies documents a positive relationship between exposure to wartime violence and within-community pro-social behaviors in settings ranging from Uganda (Blattman 2009) and Burundi (Voors et al. 2012) to Nepal (Gilligan et al. 2014). Building on this work, a recent meta-analysis of sixteen micro-level studies of violence

exposure during civil and interstate wars reports a set of surprisingly positive effects of exposure on political and social outcomes, including participation in community organizations, participation in local politics, and pro-social behavior more broadly (Bauer et al. 2016). The study concludes that violence exposure not only increases individual-level participation in local civic and political life, but leads those who have directly suffered violence to be more trusting of others in their local community, and more altruistic in experimental laboratory games. It further suggests that “the increased local cooperation we document might help to explain why some post-conflict countries experience almost miraculous economic and social recoveries” (Bauer et al. 2016: pp.4-5).

It would be easy to conclude from this body of research that, if one were to check back in on a post-conflict setting like Kaduna, Nigeria more than a decade later, things should not look too bad. Unfortunately, as we describe in detail below, that is not borne out in our survey data. There is little to suggest conditions of reconciliation or rapid recovery. Our observations from Kaduna are more consistent with a set of studies published in the past few years highlighting the negative medium- and long-term consequences of violence exposure. These studies suggest that violence exposure deepens negative intergroup attitudes and may in fact *decrease* pro-social behavior, across social groups but also within them (Hager et al. 2019).

In this vein, Beber et al. (2014) find that exposure to communal violence in Khartoum exacerbated already negative attitudes held by Sudanese Arabs toward South Sudanese residents of the city. Similarly, Grossman et al. (2015) find that exposure to combat hardens Israeli attitudes toward Palestinians, reduces support for political compromise, and increases voting for hawkish parties. Across a range of contexts, including Bosnia, Kosovo, and Kyrgyzstan, recent studies have found that individual- and community-level experiences with violent conflict solidify ethnic identities, increase distrust toward non-co-ethnics, and make ethnic parties more appealing to voters (Hadzic et al. 2020; Hager et al. 2019; Mironova and Whitt 2018). Further, this hardening of negative attitudes may also be passed down across generations (Lupu and Peisakhin 2017; Nunn and Wantchekon 2011).

What might explain this disconnect in the literature? One possibility is that the set of violence exposure studies documenting negative consequences, as well as our own observations in Kaduna, focus on intercommunal violence in settings where members of the groups in conflict live in relatively close proximity to one another. This feature applies to religiously mixed cities across Nigeria’s Middle Belt region. It also describes present and past settings of Hindu-Muslim violence in violence in urban India, and communal violence in cities in Iraq, Lebanon, Northern Ireland, and the United States, among others. In contrast, the civil and interstate wars examined by Bauer et al. (2016) in their meta-analysis are conflicts in which parties to the violence are less likely to live in close proximity before, during, or after the fighting is over. Behavioral games designed to measure pro-sociality implemented in such settings therefore reflect *within-group* improvements and cannot inform us about intergroup attitudes or behavior in the aftermath of conflict.¹ As such, it is reasonable to expect the impacts of violence exposure to be very different, a possibility that Bauer et al. (2016: p.251) themselves acknowledge.

The immediate effects of large-scale communal violence are easily observed. The case we explore here illustrates how destructive intercommunal violence can be. Casualty and displacement figures from the Christian-Muslim riots that took place in February 2000 in Kaduna are staggering, with conservative estimates of fatalities ranging from around 2,000 to 5,000 deaths, an estimated 125,000 people temporarily displaced in the aftermath of the violence, and billions of Naira lost in private property damage (Scacco and Warren 2018; Wapwera and Gajere 2017; Angerbrandt 2011).

Beyond immediate effects, we should expect intercommunal violence on this scale to have large negative medium- to long-term social, political, and psychological consequences. We highlight three types of such consequences below. Exposure to intergroup violence may: (1) *deepen intergroup mistrust*, complicating reconciliation processes, and increasing the likeli-

¹For instance, the common outcome measure of “trust” used in the studies included in Bauer et al. (2016) is “how much do you trust members of your village?” where the villages are typically homogeneous with respect to the identity cleavages along which the violence was wrought.

hood of future violence; (2) result in *radical residential segregation*, complicating processes of intergroup reconciliation; and (3) lead to lasting *psychological trauma* within affected communities. We discuss each in detail below.

Intercommunal violence erodes trust

The idea that violent conflict between groups living in close proximity worsens already fraught intergroup attitudes in divided societies is of course not new. Prior episodes of intercommunal violence make communal identities and social divisions more salient, hardening boundaries between groups in conflict (Fearon and Laitin 2000; De Waal 2005; Beber et al. 2014; Hadzic et al. 2020). Histories of conflict can make it more difficult for people living in divided societies to update negative beliefs, when faced with new, positive information about the outgroup (e.g. Fiske 1989; Devine et al. 2002). The mistrust generated by communal violence may also decrease pro-social behavior, both across (Mironova and Whitt 2018) and within (Hager et al. 2019) relevant identity groups. The impacts of communal violence on intergroup attitudes can be observed far beyond the months and years following violent events; evidence suggests that negative outgroup attitudes and high levels of outgroup mistrust can be transmitted across generations (Lupu and Peisakhin 2017; Nunn and Wantchekon 2011).

Literature in social psychology suggests that deadly communal conflicts can produce psychological repertoires of fear and grievance toward the outgroup, making it more difficult to break out of cycles of repeated conflict. Research on such repertoires, discussed in Bar-Tal and Avrahamzon (2016) and Sharvit (2014) indicates that settings of repeated conflict pose what they term a “special challenge” for prejudice reduction, as even when individuals are able to develop more favorable beliefs toward outgroup members (in lab experimental settings, for example), they are difficult to maintain in communities that perpetuate a culture of conflict. Further, even when explicit attitudes or beliefs shift in a more positive direction, recent lab experimental work in the Israeli context suggests that outgroup animosity may continue to be stored in implicit beliefs and attitudes (Sharvit 2014).

The notion of a conflict repertoire resonates with field-based experiences from Nigeria's Middle Belt region relayed in (Scacco 2020). During fieldwork conducted in the riot-prone city of Jos (a few hours' drive from Kaduna) in 2007, one of the authors experienced what might be best termed a "near-riot" due to a misunderstanding conceivably amplified by the type of conflict repertoire the psychology literature identifies.

One summer morning, the author woke to cries from neighbors that there was "trouble in the town" because "the Muslims were mobilizing" for a riot. In Jos, commercial motorcycle drivers (who offer an inexpensive, efficient form of transport that many local commuters rely on) have historically tended to be Muslim men. In the hours that followed, rumors spread quickly through Christian neighborhoods that "religious trouble" was brewing. In reality, the motorcycle drivers had begun marching through the town and setting up roadblocks as part of a labor strike in protest against a recent order by the city government that they were no longer allowed to transport passengers after dark.

A religious riot was prevented through swift military intervention (by chance, due to the nearby location of a federal military barracks), but the panic and fear generated by the sight of outgroup members marching together was unmistakable. The town of Jos had experienced deadly Christian-Muslim riots in 2001 and 2004, resulting in thousands of deaths. This history of violence led ordinary people to interpret an innocuous event through the lens of intergroup threat, shedding light on the process by which violence can beget violence in conflict settings and stubborn prejudices may be difficult to dislodge. Indeed, the very fact that episodes of communal violence tend to occur again and again in the same localities (for example, see Varshney (2003); Wilkinson (2006) for detailed evidence on the spatial concentration of Hindu-Muslim riots in post-WWII India) suggests how difficult it is for groups to reconcile after violence.

Intercommunal violence and local segregation

Another feature of life in the wake of violent conflict can further amplify the problem of intergroup mistrust. Deadly communal conflicts often increase local residential segregation, as people who no longer feel safe living in close proximity to outgroup members move into ingroup residential enclaves. Intercommunal violence of the form we consider may be particularly likely to produce diverse yet locally segregated environments, as households relocate within the same locality.²

Although motivated by a desire for safety, local segregation along communal lines may provide especially fertile ground for intergroup prejudice and animosity. Recent studies have identified pernicious effects of segregation on racial prejudice and discrimination in American cities (Enos 2017), interreligious mistrust and violence in Jerusalem (Rokem et al. 2018), cycles of ethnic violence in Iraq (Weidmann and Salehyan 2013) and Kenya (Kasara 2017), and studies in laboratory settings (Enos and Celaya 2018).

One reason for this is that residential segregation in particular limits opportunities for meaningful cross-group social interactions among ordinary people – and communal leaders – that can provide information to quell incendiary rumors and resolve small-scale conflicts (Kasara 2013). Although residential segregation may make people feel more safe where they live, if things *do* go wrong, it is more difficult to contain communal violence in its early stages.

Other research links segregation with high levels of prejudice and mistrust more directly, independent from segregation’s impact on levels of intergroup contact in daily life. Enos (2017) argues that diverse but segregated local geographies make identities of groups in tension more salient. Increased salience leads to more biased attitudes and behavior across the identity cleavage. Enos argues: “Social geography creates space between us in our heads before it creates a space between us in our relationships” (Enos 2017: p.15). If segregation has both direct and indirect (through the standard theorized path of reduced intergroup

²For an ethnographic account of “house swapping” by Christians and Muslims within the Kaduna metropolitan area as part of a systematic process of post-conflict residential sorting, see Scacco (2020).

contact) negative effects on attitudes toward and perceptions about the outgroup, we should expect a greater risk of conflict recurrence in diverse but segregated local settings.

Psychological consequences of violence exposure

On the surface, it might seem that the populations of cities “bounce back” quickly after even large-scale episodes of communal violence. People might resume trading across lines of cleavage in local markets weeks, or even days, after the riots. However, an emerging literature on the psychological impact of intercommunal violence suggests that deeper scars may linger for years in post-conflict settings.

The effects of violent conflict on mental health may be direct, if they stem from direct exposure to traumatic events, or indirect, if they arise from displacement, or any other consequences of violent conflict, such as disruption of livelihoods. Direct effects of violence exposure on mental health include post-traumatic stress disorder (PTSD), insomnia, anxiety and depression (Mpembi et al. 2018; Bogic et al. 2015; Gordon et al. 2010). Conflict exposure may affect mental health indirectly, as a result of displacement, scarcity of basic necessities, such as food and water, and the loss of family and financial stability (Garry and Checchi 2020). To the extent that violent conflict increases the number of people living in extreme poverty where it occurs, we can draw on a large body of literature documenting the negative impacts of poverty on mental health (e.g. Patel and Kleinman 2003; Lund et al. 2010). Given the scale and intensity of the interreligious communal violence in religiously heterogeneous contexts, it is reasonable to expect to observe lingering negative mental health consequences among its survivors years many years later.

In sum, the literature leads us to expect at least three sets of negative consequences of exposure to intercommunal violence in the medium to long term. That said, we do not intend to suggest that there is no hope at all for post-conflict reconciliation. Our goal here is simply to caution against applying optimistic expectations from the empirical literature on the effects of violence exposure on within-group pro-sociality to intergroup relations. Various

dimensions of post-conflict reconciliation can be difficult and painful. Rebuilding intergroup trust can take time and can easily experience set-backs. We should not be surprised if recovery is slow and if gains are reversed.

Christian-Muslim relations in Nigeria

We now turn to a discussion of Christian-Muslim intergroup relations in the Nigerian context. Decades of conflict across often-overlapping ethnic and religious lines within the Nigerian state shaped the lens through which Kaduna residents could interpret and respond to the violent riot that shook the city in 2000.

Although social demography has long been, and continues to be, an issue of controversy and contestation, we can accurately claim that Nigeria is a multi-ethnic state of approximately 200 million people, with relatively equal proportions of Muslims and Christians and hundreds of ethnic groups. The Christian-Muslim political divide dates to British colonial policy, under which the predominantly Muslim North and largely Christian South were separately governed as the Northern and Southern Nigerian Protectorates (until 1914), then unified as the colony of Nigeria (1914-1954), and finally re-divided into three regions by splitting the Southern region into a Christian-dominant Eastern region and a religiously mixed Western region. The dominant ethnic group in each of these regions is one of Nigeria's three largest ethnic groups: Northern (Hausa, Muslim), Eastern (Igbo, Christian), and Western (Yoruba, both Christian and Muslim).

Civil and communal violence have occurred frequently across various social cleavage lines in Nigeria since independence in 1960. Just seven years after Nigeria obtained independence, a civil war broke out along a reinforcing ethnic and religious divide. The Eastern region, predominantly Igbo and Christian, attempted to secede as the independent nation of Biafra. The Nigerian government and military, under primarily Northern (Muslim) leadership, was victorious in the three-year civil war (1967-1970). In the process, over two million

civilians within Biafra died. Interreligious tensions in Nigeria continued after the war, and still underpin many contemporary political grievances within Nigeria (Kendhammer 2014). Throughout the 1980s, many Nigerian Christians believed that the predominantly Muslim North received a disproportionate share of both political power and economic resources, fanning resentment across religious lines (Ibrahim 1991: p.135).

During the late 1980s and early 1990s, as Nigeria haltingly inched towards a return to multi-party politics, violence across reinforcing religious and ethnic cleavages began to increase (Ibrahim 1991; Falola 1998). Some of this violence occurred within Nigeria's cultural Middle Belt, the region in which the dominantly Christian south and dominantly Muslim north meet, including a religious riot in Kafanchan, in Kaduna state, in 1987 which resulted in 25 deaths, serious property destruction, and spread to other cities and states in the region. Events such as the Kafanchan riot produced a reference point of religious violence through which subsequent communal conflicts in the Middle Belt and Kaduna could be interpreted. Yet the scale of violence remained small.

With Nigeria's return to multi-party elections in 1999, communal violence across religious lines increased more dramatically (Ukiwo 2003). Deadly interreligious violence recurred regularly in this period. There were only three years between 1990 and 2008 in which there were no recorded incidents and at least at least 4,703 fatalities occurred in the same period (Basedau et al. 2013). Large-scale communal violence particularly began to concentrate across Nigeria's cultural Middle Belt, as shown in Figure 1, which compares riot events in two key states in the Middle Belt region – Kaduna and Plateau – with riot events in the rest of Nigeria. The height of each bar represents the number of riot events that occurred, while the numbers atop each bar represent total casualties from these events. We observe that violence in Kaduna state in 2000 was an outlier relative to the rest of the period with nearly 4,000 people killed in three incidents that year. We will return to the events of 2000 in the next section.

[Insert Scacco-Warren Figure 1 here]

Interreligious tensions in contemporary Nigeria have become self-reinforcing at the national level alongside repeated violent incidents. A 2009 *Pew Forum on Religion and Public Life* survey of 1,516 Nigerians examines the attitudes of Christians and Muslims towards religion and each other, and situates Nigerian public opinion within a sample of nineteen sub-Saharan African countries (Pew Forum 2010). Over half (58%) of Nigerians believe that religious conflict is a very big problem in their country, the largest proportion of any of the nineteen sampled countries (tied with Rwanda). Both Christian and Muslim Nigerians are deeply religious; large majorities of both Christians and Muslims pray every day, believe that their holy books are the literal word of God, and would like the Bible and/or sharia to become the official law of the land, as shown in Table 1. Indeed Nigerians are more likely than respondents from any other country in the Pew sample to believe that the Bible and/or Koran are the literal word of God. This centrality of religious practice in daily life, combined with an interreligious conflict repertoire drawn from recent past experience with violence reinforces the salience of religious identity. In short, in Nigerian society religion is highly politicized, the Muslim-Christian divide is highly salient, and Nigerians are deeply concerned about interreligious conflict.

Table 1: Religious Beliefs, Religious Practice and Public Life in Nigeria

	Muslim	Christian
Conflict between religious groups a very big problem	60%	56%
Conflict between ethnic groups a very big problem	48%	48%
Sharia and/or Bible is literal word of God	90%	87%
Sharia and/or Bible should be official law	70%	71%
Know not very much or nothing at all about other faith	63%	55%
Pray every day	93%	92%

Data from Pew Forum on Religion and Public Life, 2009. Accessed 1 Nov 2019 via <https://www.pewforum.org/interactives/africa/>.

Christian-Muslim relations in the shadow of violence: Kaduna

The city of Kaduna erupted in the worst interreligious violence ever witnessed in Nigeria's history over four days in February 2000. The Kaduna state government issued a report

documenting 1,295 deaths during the riots, although other sources have suggested the true numbers may be far higher (Tertsakian 2003; Scacco 2020). The fighting was sparked by a public debate over whether to introduce Shari'a law into the criminal code in Kaduna state. Although Shari'a provisions had long been incorporated into "personal" or domestic law for Muslims throughout northern Nigeria, the debate raised concerns in religiously heterogeneous states that Shari'a would be imposed on Christian communities (Abdu and Umar 2002).

Several months before the violence in Kaduna, the government of Zamfara, an overwhelmingly Muslim state bordering Niger, decided to incorporate Shari'a laws into its state criminal code. State legislatures across the northern region soon followed suit, with the exception of states like Kaduna and Plateau, which contain large Christian populations. The issue was particularly contentious in Kaduna, and its governor at the time, Ahmed Makarfi, strongly opposed introducing Shari'a. In January 2000, however, under pressure from Muslim civil society organizations, the Kaduna State Assembly opened debate on the suitability of Shari'a criminal law for Muslim residents of the state. The action divided the assembly along religious lines, and sparked vocal protests from Christian civil society organizations (Kaduna State Government 2001; Tertsakian 2003; Sani 2007).

On February 21, the Kaduna branch of the Christian Association of Nigeria organized an anti-Sharia demonstration. Announcements were made in churches across Kaduna city, urging parishioners to attend the demonstration, and the event attracted hundreds of demonstrators (Ullah 2002). Accounts of how exactly the fighting began differ, but small numbers of Christians and Muslims began throwing stones at each other as demonstrators made their way past Kaduna's crowded central market (Maier 2002). At this point, the fighting spread quickly, engulfing the town center in violence, as Christian protesters fought with Muslim traders in the market, using simple weapons, such as stones and wooden planks. The fighting in the largely commercial center of town spread outward to residential areas across the Kaduna metropolitan area, as rumors circulated about atrocities committed on either side. Interview respondents from neighborhoods across Kaduna recalled seeing smoke rising from

the center of town, and hearing stories about churches and mosques being set on fire (Scacco 2020). The riots lasted for four days, and were only put to rest when the central government ordered the military to intervene.

Violence in Kaduna in 2000 changed life in the city dramatically, as residents viewed the riots as evidence that it was no longer safe to live near outgroup members, and abandoned more integrated neighborhoods and self-segregated across religious lines (Angerbrandt 2011). Figure 2 presents quantitative evidence of the increased segregation of 10 Kaduna neighborhoods using data from Scacco (2020). The x-axis measures the difference in proportions of each religious group living in the neighborhoods in 2000, and the y-axis the same data from 2008. If neighborhood composition had remained unchanged all points would fall along the dotted line. Points above the line indicate increased segregation, which all ten neighborhoods experienced. While Kaduna was not a religiously integrated city before the 2000 riot by any means, it had already become much more segregated eight years later.

[Insert Scacco-Warren Figure 2 here]

In the remainder of this chapter, we present a micro-level analysis of Christian-Muslim relations within the city of Kaduna to examine the long shadow cast by severe communal violence fifteen years after a major violent event. We use data from the control group for an experimental study of intergroup contact conducted in Kaduna in 2014-2015 as outlined in (Scacco and Warren 2018). The sampling frame includes all poor, conflict-prone neighborhoods within one hour's travel to central Kaduna, a city of approximately one million residents in north-central Nigeria, a few hours' drive from the national capital. Sixteen neighborhoods, eight in Kaduna's majority Muslim north and eight in Kaduna's majority Christian south, were selected from this frame.

The final sample consists of 270 young men, ages 18-25 who were recruited for a baseline survey in August 2014, and interviewed about intergroup relations in January and December 2015. Table 2 demonstrates that our sample reflects the segregated context that defines con-

temporary Kaduna. Two neighborhoods include minority religious group enclaves: Barnawa and Kakuri. Barnawa is a predominantly Christian neighborhood, but within the market area of the neighborhood there is a small and concentrated Muslim minority. In both cases, residential segregation at street level is the norm, and neither are cases of well-integrated neighborhoods. The residential segregation already evident in 2008 has continued or deepened, and has led to religious segregation in education and other aspects of daily living.

Table 2: Survey Sample and Residential Segregation in Kaduna, January 2015

Neighborhood	Muslims	Christians	Segregation
	(N)	(N)	(% Dominant Group)
Badarawa	21	0	100%
Badiko	13	0	100%
Barnawa	11	4	73%
Hayin Banki	16	1	94%
Kakuri	10	18	64%
Kawo	11	0	100%
Kurmin Mashi	18	3	86%
Malali	8	0	100%
Narayi	0	46	100%
Nassarawa	0	8	100%
Sabon Tasha	0	20	100%
Tudun Nupawa	14	0	100%
Kanawa	8	0	100%
Shanu	15	0	100%
Sunday	0	10	100%
Television	0	15	100%
Total	145	125	-

Within the city of Kaduna, as in most of Nigeria, there is also broad overlap between religious and ethnic identities. Table 3 demonstrates the extent of this overlap within our sample. Our survey asked respondents to name their ‘home language’. ³ The left-hand column lists all home languages cited by at least two percent of all respondents, ordered from most to least frequently cited. The remaining two columns present the share of Muslim or Christian respondents who cited those home languages. All languages cited by less than 2%

³Home language’ is equivalent to ethnic affiliation in Nigeria.

of either sample are grouped together within the ‘Other’ category. Significantly, we observe that 84% of all Muslims, yet only 2% of Christians, in the sample are Hausa. Furthermore, among sampled Christians there is no home language cited by more than 12% of all respondents. Similarly, there is greater diversity of religious practice among Christian young men than among Muslim young men in our sample. As shown in Table 4, 75% of Muslims are affiliated with the Izala Brotherhood. Catholics, the largest Christian denomination with our sample, only comprise 41% of sampled Christians, and the Pentecostal and Evangelical categories include many different denominations.

As one would expect, since there is one predominant ethnic group among Kaduna’s Muslims, and highly fragmented ethnicity among Kaduna’s Christians, intra-religious ethnic conflict within the city of Kaduna has not emerged as a major fault line. Instead, the religious divide forms the main social cleavage.

Table 3: Survey Sample: Religion and Language (Ethnicity), January 2015

	Muslim	Christian
Hausa	84%	2%
Kataf	-	12%
Baju	-	12%
Igala	2%	10%
Yoruba	3%	6%
Igbo	-	9%
Idoma	-	7%
Gabagyi	1%	5%
Jaba	-	6%
Adara	-	2%
Ikulu	-	3%
Ibira	2%	-
Other	8%	26%
	100%	100%

Adherents of both religious faiths also report high levels of religious participation and engagement, as shown in Table 4. Nearly all (99%) of Muslim young men indicated that they go to a mosque to pray multiple times a day, and 97% of Christians report attendance

at religious services at least once a week. Despite differences in religious obligation, both Christian and Muslim young men in our sample report high levels of engagement with the observance of rituals of their respective faiths.

Table 4: Survey Sample: Religious Practice, January 2015

	Muslim	Christian
Brotherhood or Denomination	Izala (75%) Tijaniya (11%) Unaffiliated (11%) Quadriya (3%)	Catholic (41%) Pentecostal (28%) Evangelical (25%) Anglican (6%)
House of Worship Attendance	Multiple Times per Day (99%) Less than Monthly (1%)	Every Day (6%) Several Times per Week (61%) Once per Week (30%) Monthly or Less Often (3%)

In sum, the poor urban neighborhoods we study in Kaduna replicate Nigeria’s broad North-South and Muslim-Christian divide, and the religiosity of Nigerians across the country. This social cleavage within the city of Kaduna is reinforced by a combination of an overlapping ethnic (Hausa-non-Hausa) divide and everyday religious practice. While the vast majority of Muslims are affiliated with the Izala Brotherhood and go to mosques multiple times per day, among Christians there is extensive variation in denomination and frequency of church attendance.

In spite of extreme residential segregation, Christian and Muslim residents of Kaduna do interact in daily life, but in generally superficial ways. Despite some regular interactions in employment, transportation and shopping, Christians and Muslims in Kaduna exhibit high levels of anxiety about interactions and low levels of trust across group lines, even fifteen years post-conflict. Within our Kaduna micro sample, 30% of Christians and 40% of Muslims reported feeling anxious around members of the religious outgroup. Table 5 presents the results of a series of questions about social trust, as well as estimated ‘trust deficits’ comparing trust in members of an individual’s ingroup faith and tribe to trust in members

of the outgroup faith and other tribes. We again show results for the full sample as well as the Muslim and Christian subsamples. As we would anticipate, respondents trust members of their own families more than any of the other prompted types. Beyond their own families, respondents report the greatest trust in co-religionists, and the least in non-co-ethnics. Levels of trust are lower for members of the religious outgroup than those of the same faith, as shown by the negative estimated religious trust deficits.

Table 5: Intergroup Trust, January 2015

	All	Muslim	Christian
Religion and Trust			
Own religion	2.08 (0.05)	2.58 (0.05)	1.50 (0.07)
Other religion	1.75 (0.05)	2.13 (0.06)	1.30 (0.06)
Religious trust deficit	-0.33 (0.05)	-0.44 (0.06)	-0.19 (0.08)
Ethnicity and Trust			
Own tribe	1.90 (0.05)	2.36 (0.06)	1.36 (0.06)
Other tribes	1.68 (0.05)	2.03 (0.06)	1.26 (0.06)
Tribal trust deficit	-0.23 (0.08)	-0.33 (0.05)	-0.10 (0.06)
Familial Trust			
Relatives	2.35 (0.06)	2.87 (0.04)	1.74 (0.08)
Observations	<i>270</i>	<i>145</i>	<i>125</i>

Question: “How much do you trust each of the following types of people?” Responses scaled 0 (Not at all) - 3 (Very much).
Standard errors in parentheses.

Both Muslims and Christians in Kaduna have significantly less social trust than is typical in Nigeria more broadly. National averages are between “trust somewhat” and “trust a lot” for relatives, yet are between ‘trust a little’ and “trust not at all” for Kaduna state residents. Over half of Kaduna residents reported not trusting their relatives at all. Only residents of the federal capital Abuja reported anywhere near that total, and nationally, less than

13% of Nigerians report a complete lack of trust in their relatives. With respect to trust in neighbors, Kaduna residents are again an extreme outlier in comparison to the rest of the country (Pew Forum 2010).

Table 6 presents summary results by religious group for an index of explicit prejudice. Respondents were asked how well each of a series of interspersed positive and negative attributes described members of the religious outgroup. Negative attributes consisted of *arrogant*, *ungrateful*, *unreasonable* and *fanatical*. Responses are scaled such that higher values indicate stronger disagreement with negative attributes. Within poor neighborhoods in Kaduna, both Muslims and Christians express overtly prejudiced attitudes towards members of the religious outgroup. The mean Negative Attributes index value for all respondents of 1.73 in the January 2015 survey indicates that the average respondent fell between agreement with the negative attributes and ambivalence. As has been the case in other surveys in Nigeria and sub-Saharan Africa, Christians have more negative perceptions of Muslims than Muslims do of Christians (e.g. Pew Forum 2010).

Table 6: Prejudice Indices, January 2015 and December 2015

	January 2015			December 2015		
	All	Muslim	Christian	All	Muslim	Christian
Prejudice index	1.73	2.10	1.31	2.08	2.38	1.70
	(0.07)	(0.11)	(0.08)	(0.07)	(0.09)	(0.08)
Observations	225	119	106	246	138	108

Responses scaled 0 (most prejudice) - 4 (least prejudice). Standard errors in parentheses.

Table 7 presents summary results by religious group for a behavioral game implemented during two rounds of our Kaduna survey in January and December 2015. Respondents played ten rounds of a dictator (“divide the dollar”) game in both January and December 2015. Within behavioral economics and political science, the dictator game has been widely used to measure altruism and discrimination. In each round of the game, survey respondents were asked in a row to choose how to divide 100 Nigerian Naira (about .50 USD at the time of game implementation) from a common pool with another randomly assigned

survey respondent. We primed survey respondents with the first name of the individual to whom they could choose to allocate money, and asked them to indicate how many 10-naira notes they would give to the named individual. Importantly, within Kaduna, first names clearly and unambiguously signal religious affiliation. Respondents were informed that game play was non-reciprocal (for example, being asked to divide 100 Naira with Shehu does not necessarily mean Shehu will be asked to divide 100 Naira with you). This design mitigated concerns about retribution. All behavioral games were administered privately at respondent households; respondents circled the number of notes to give in each round on a separate response sheet.

We implemented this game to examine how the treatment of individuals from the outgroup differs from those from the ingroup based solely on group affiliation, the only cue offered in the game. We find that respondents systematically discriminate against members of the religious outgroup, with the exception of Christian respondents in the January 2015 survey. We note that Nigeria held an election in early February 2015 in which a Christian incumbent president lost the election to a Muslim challenger, representing Nigeria’s first democratic transfer of power between parties since its independence in 1963. While ethnic identity is often heightened in the run-up to elections (Eifert et al. 2010), tensions on the eve of the election may have encouraged Christian respondents to censor their behavior.

Table 7: Discrimination

	January 2015			Nov-Dec 2015		
	All	Muslim	Christian	All	Muslim	Christian
Play outgroup	-0.19** (0.06)	-0.34** (0.08)	-0.02 (0.07)	-0.26** (0.06)	-0.29** (0.07)	-0.21* (0.08)
Constant	2.57** (0.10)	2.59** (0.14)	2.55** (0.15)	2.78** (0.12)	2.62** (0.15)	2.97** (0.19)
Observations	<i>2700</i>	<i>1450</i>	<i>1250</i>	<i>2730</i>	<i>1430</i>	<i>1300</i>

Standard errors (in parentheses) clustered by respondent. * $p < 0.5$, ** $p < 0.01$

Turning to the question of the potentially long-term consequences of exposure to com-

munal violence for mental health, although our own survey did not include measures of respondents' mental health, we draw on three recent public health studies that examine large samples of survivors of Christian-Muslim violence in Kaduna and Jos, another religiously mixed state capital city in northern Nigeria that experienced large-scale Christian-Muslim violence in 2001. All three studies indicate widespread trauma in adult populations of survivors. Taken together, the Kaduna studies document high levels of PTSD (more than 40% of respondents) and depression (between 50 and 60%) among interview respondents — who witnessed violence, were temporarily displaced from their homes, and/or experienced personal property destruction — many years after large-scale episodes of communal violence in 2000 and 2001 (Obilom and Thacher 2008; Sheikh et al. 2014, 2015).

Conclusion

In this chapter we have demonstrated that large-scale intercommunal violence across religious lines may produce severe and long-lasting consequences. Using micro-level data from Kaduna, Nigeria gathered fifteen years after a major violent event that produced lasting residential segregation, we find that lack of trust and prejudice across religious group divides may be particularly tenacious, given the close intra-group ties that are formed and reinforced through everyday religious practice and residential segregation. In contrast to optimistic assessments of relatively speedy post-conflict recoveries in homogeneous local settings, and positive consequences of violence exposure for *within-group* cooperation and trust, we find that violence exposure may necessitate a longer recovery in more diverse settings. Localities like Kaduna, Baghdad, Belfast, and Ahmedabad that have experienced interreligious communal violence should expect post-conflict reconciliation to be slow, difficult, and far from guaranteed.

How then can social recovery occur after communal violence across religious lines? Building and strengthening interreligious economic ties at the local level may increase trust and decrease riot events in the long run, as has been demonstrated in India (Jha 2013). Social

contact theory suggests that efforts to desegregate public life and increase social contact across group lines may rebuild trust, decrease prejudice, reduce discrimination, and thereby reduce the potential for violent conflict (Allport 1954). Recent experimental studies of Christian-Muslim social contact interventions in Kaduna (Scacco and Warren 2018) and Baghdad (Mousa 2020) have demonstrated that, although interreligious prejudice may be slow to change, micro-level interventions may be helpful in reducing discriminatory behaviors, even in settings with particularly difficult conflict histories.

Figure Captions

Scacco-Warren Figure 1

Communal riot deaths in Nigeria, 1999-2018. Bars represent deaths from riot events in Kaduna, Plateau, and all other Nigerian states combined. Data credit: Armed Conflict Location and Event Data (ACLED), <https://acleddata.com/about-acled/>, Social Conflict Analysis Database (SCAD), <https://www.strausscenter.org/ccaps-research-areas/social-conflict/database/>, and Shehu Sani, *The Killing Fields: Religious Violence in Northern Nigeria*. Spectrum Books, 2007.

Scacco-Warren Figure 2

Segregation of Kaduna neighborhoods, 2000 vs. 2008. The x-axis measures the difference in proportions of each religious group living in the neighborhoods in 2000, and the y-axis the same data from 2008. Data credit: Scacco (2020).

References

- Abdu, Hussaini and Lydia Umar (2002). Hope betrayed: A report on impunity and state-sponsored violence in Nigeria. World Organization Against Torture and Center for Law Enforcement Education (OMCT Report) Lagos, Nigeria.
- Allport, Gordon Willard (1954). *The Nature of Prejudice*. Reading, MA: Addison-Wesley.
- Angerbrandt, Henrik (2011). Political decentralisation and conflict: The sharia crisis in Kaduna, Nigeria. *Journal of Contemporary African Studies* 29(1), 15–31.
- Bar-Tal, D and T Avrahamzon (2016). Development of delegitimization and animosity in the context of intractable conflict. In C. G. Sibley and F. K. Barlow (Eds.), *Cambridge Handbook of the Psychology of Prejudice*, pp. 582–606. Cambridge University Press.
- Basedau, Matthias, Johannes Vüllers, and Peter Körner (2013). What drives inter-religious violence? Lessons from Nigeria, Côte d’Ivoire, and Tanzania. *Studies in Conflict & Terrorism* 36(10), 857–879.
- Bauer, Michal, Christopher Blattman, Julie Chytilová, Joseph Henrich, Edward Miguel, and Tamar Mitts (2016). Can war foster cooperation? *Journal of Economic Perspectives* 30(3), 249–74.
- Beber, Bernd, Philip Roessler, and Alexandra Scacco (2014). Intergroup violence and political attitudes: Evidence from a dividing Sudan. *The Journal of Politics* 76(3), 649–665.
- Blattman, Christopher (2009). From violence to voting: War and political participation in Uganda. *American Political Science review* 103(2), 231–247.
- Bogic, Marija, Anthony Njoku, and Stefan Priebe (2015). Long-term mental health of war-refugees: a systematic literature review. *BMC international health and human rights* 15(1), 1–41.
- De Waal, Alex (2005). Who are the Darfurians? Arab and African identities, violence and external engagement. *African Affairs* 104(415), 181–205.
- Devine, Patricia G, E Ashby Plant, David M Amodio, Eddie Harmon-Jones, and Stephanie L Vance (2002). The regulation of explicit and implicit race bias: the role of motivations to respond without prejudice. *Journal of Personality and Social Psychology* 82(5), 835.
- Eifert, Benn, Edward Miguel, and Daniel N Posner (2010). Political competition and ethnic identification in Africa. *American Journal of Political Science* 54(2), 494–510.
- Enos, Ryan D (2017). *The Space between Us: Social Geography and Politics*. Cambridge University Press.

- Enos, Ryan D and Christopher Celaya (2018). The effect of segregation on intergroup relations. *Journal of Experimental Political Science* 5(1), 26–38.
- Falola, Toyin (1998). *Violence in Nigeria: The Crisis of Religious Politics and Secular Ideologies*. University Rochester Press.
- Fearon, James D and David D Laitin (2000). Violence and the social construction of ethnic identity. *International Organization* 54(04), 845–877.
- Fiske, Susan T (1989). Examining the role of intent: Toward understanding its role in stereotyping and prejudice. In J. S. Uleman and J. A. Bargh (Eds.), *Unintended Thought*, Volume 253, pp. 283. Guilford Press.
- Garry, S and F Checchi (2020). Armed conflict and public health: into the 21st century. *Journal of Public Health* 42(3), e287–e298.
- Gilligan, Michael J, Benjamin J Pasquale, and Cyrus Samii (2014). Civil war and social cohesion: Lab-in-the-field evidence from Nepal. *American Journal of Political Science* 58(3), 604–619.
- Gordon, Stuart, Amanda Baker, Alexia Duten, and Paul Garner (2010). Study exploring the evidence relating health and conflict interventions and outcomes. Technical report, UK Cross Government Group on Health and Conflict.
- Grossman, Guy, Devorah Manekin, and Dan Miodownik (2015). The political legacies of combat: Attitudes toward war and peace among Israeli ex-combatants. *International Organization* 69(4), 981–1009.
- Hadzic, Dino, David Carlson, and Margit Tavits (2020). How exposure to violence affects ethnic voting. *British Journal of Political Science* 50(1), 345–362.
- Hager, Anselm, Krzysztof Krakowski, and Max Schaub (2019). Ethnic riots and prosocial behavior: Evidence from Kyrgyzstan. *American Political Science Review* 113(4), 1029–1044.
- Ibrahim, Jibrin (1991). Religion and political turbulence in Nigeria. *The Journal of Modern African Studies* 29(1), 115–136.
- Jha, Saumitra (2013). Trade, institutions, and ethnic tolerance: Evidence from South Asia. *American Political Science Review* 107(4), 806–832.
- Kaduna State Government (2001, April). White paper on the report of judicial commission of inquiry into Kaduna state religious disturbances of February 2000.
- Kasara, Kimuli (2013). Separate and suspicious: the social environment and inter-ethnic trust in Kenya. *The Journal of Politics* 75(4), 921–936.

- Kasara, Kimuli (2017). Does local ethnic segregation lead to violence?: Evidence from Kenya. *Quarterly Journal of Political Science* 11(4), 441–470.
- Kendhammer, Brandon (2014). Citizenship, federalism and powersharing: Nigeria’s federal character and the challenges of institutional design. *Ethnopolitics* 13(4), 396–417.
- Lund, Crick, Alison Breen, Alan J Flisher, Ritsuko Kakuma, Joanne Corrigan, John A Joska, Leslie Swartz, and Vikram Patel (2010). Poverty and common mental disorders in low and middle income countries: A systematic review. *Social Science & Medicine* 71(3), 517–528.
- Lupu, Noam and Leonid Peisakhin (2017). The legacy of political violence across generations. *American Journal of Political Science* 61(4), 836–851.
- Maier, Karl (2002). *This house has fallen: Nigeria in crisis*. Westview Press.
- Mironova, Vera and Sam Whitt (2018). Social norms after conflict exposure and victimization by violence: Experimental evidence from Kosovo. *British Journal of Political Science* 48(3), 749–765.
- Mousa, Salma (2020). Building social cohesion between Christians and Muslims through soccer in post-ISIS Iraq. *Science* 369(6505), 866–870.
- Mpembu, Magloire Nkosi, Thierry Lukeba, Damien Mayemba, Victoria Kubuta Massamba, Ma Nzuzi, Symphorien Gokara, Etienne Vermeiren, Ma Miezi SM, et al. (2018). Stress syndrome in patients receiving outpatient treatment at the general hospital, in bangui, in a context of armed conflict. *The Pan African Medical Journal* 29, 26–26.
- Nunn, Nathan and Leonard Wantchekon (2011). The slave trade and the origins of mistrust in Africa. *American Economic Review* 101(7), 3221–52.
- Obilom, Rose E and Tom D Thacher (2008). Posttraumatic stress disorder following ethnoreligious conflict in Jos, Nigeria. *Journal of Interpersonal Violence* 23(8), 1108–1119.
- Patel, Vikram and Arthur Kleinman (2003). Poverty and common mental disorders in developing countries. *Bulletin of the World Health Organization* 81, 609–615.
- Pew Forum (2010). Tolerance and tension: Islam and Christianity in sub-Saharan Africa. Technical report, Pew Forum on Religion & Public Life.
- Rokem, Jonathan, Chagai M Weiss, and Dan Miodownik (2018). Geographies of violence in Jerusalem: the spatial logic of urban intergroup conflict. *Political Geography* 66, 88–97.
- Sani, Shehu (2007). *The Killing Fields: Religious Violence in Northern Nigeria*. Spectrum Books Ltd Ibadan.

- Scacco, Alexandra (2020). Anatomy of a riot: Participation in ethnic violence in Nigeria. Book Manuscript, WZB Berlin Social Science Center.
- Scacco, Alexandra and Shana S Warren (2018). Can social contact reduce prejudice and discrimination? evidence from a field experiment in Nigeria. *American Political Science Review* 112(3), 1–24.
- Sharvit, Keren (2014). How conflict begets conflict: Activation of the ethos of conflict in times of distress in a society involved in an intractable conflict. *Journal of Experimental Social Psychology* 55, 252–261.
- Sheikh, Taiwo Lateef, Mohammed Abdulaziz, Samuel Agunbiade, Ike Joseph, Bill Ebiti, and Oluwatosin Adekeye (2015). Correlates of depression among internally displaced persons after post-election violence in Kaduna, North Western Nigeria. *Journal of Affective Disorders* 170, 46–51.
- Sheikh, Taiwo Lateef, Abdulaziz Mohammed, Samuel Agunbiade, Joseph Ike, William N Ebiti, and Oluwatosin Adekeye (2014). Psycho-trauma, psychosocial adjustment, and symptomatic post-traumatic stress disorder among internally displaced persons in Kaduna, Northwestern Nigeria. *Frontiers in Psychiatry* 5, 127.
- Tertsakian, Carina (2003). *Nigeria: the “Miss World Riots”: Continued Impunity for Killings in Kaduna*. Human Rights Watch.
- Ukiwo, Ukoha (2003). Politics, ethno-religious conflicts and democratic consolidation in Nigeria. *The Journal of Modern African Studies* 41(1), 115–138.
- Ullah, Haroon (2002). Perspectives on shariah, federalism and religious associations in Nigeria: An urban case study of Kaduna and the riots of 2000. Technical report, University of Michigan, Department of Political Science.
- Varshney, Ashutosh (2003). *Ethnic Conflict and Civic Life: Hindus and Muslims in India*. Yale University Press.
- Voors, Maarten J, Eleonora EM Nillesen, Philip Verwimp, Erwin H Bulte, Robert Lensink, and Daan P Van Soest (2012). Violent conflict and behavior: a field experiment in Burundi. *American Economic Review* 102(2), 941–64.
- Wapwera, Samuel Danjuma and Jiriko Kefas Gajere (2017). Ethnoreligious urban violence and residential mobility in Nigerian cities: The Kaduna experience. *Urban Studies Research*.
- Weidmann, Nils B and Idean Salehyan (2013). Violence and ethnic segregation: A computational model applied to Baghdad. *International Studies Quarterly* 57(1), 52–64.

Weiss, Chagai M (2020). Reducing prejudice through descriptive representation: Evidence from a natural experiment in Israeli medical clinics. Working Paper.

Wilkinson, Steven I (2006). *Votes and violence: Electoral competition and ethnic riots in India*. Cambridge University Press.