The Determinants of Religious Radicalization: Evidence from Kenya

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Abstract
A variety of theories attempt to explain why some individuals radicalize along religious lines. Few studies, however, have jointly put these diverse hypotheses under empirical scrutiny. Focusing on Muslim-Christian tensions in Kenya, we distill salient micro-, meso-, and macro-level hypotheses that try to account for the recent spike in religious radicalization. We use an empirical strategy that compares survey evidence from Christian and Muslim respondents with differing degrees of religious radicalization. We find no evidence that radicalization is predicted by macro-level political or economic grievances. Rather, radicalization is strongly associated with individual-level psychological trauma, including historically troubled social relations, and process-oriented factors, particularly religious identification and exposure to radical networks. The findings point to a model of radicalization as an individual-level process that is largely unaffected by macro-level influences. As such, radicalization is better understood in a relational, idea-driven framework as opposed to a macro-level structural approach.

Keywords
radicalization, religion, Kenya, extremism

Introduction
Scholars have put forth various theories that try to explain why individuals radicalize along religious lines. Theoretical contributions offer micro-level psychological, meso-level process-oriented, and macro-level sociopolitical explanations.1 Yet,
there are few empirical accounts that have jointly put the theories under systematic scrutiny (Schmid 2013). Existing empirical studies are mostly confined to profiles of small groups of radicalized individuals (della Porta 2006; Horgan 2012; Harris-Hogan 2013; Ilardi 2013; Schuurman and Horgan 2016). While such studies provide an important source of information to generate hypotheses, they are not designed to systematically test the many competing hypotheses in the radicalization literature. A particularly significant limitation in such studies is selection on the dependent variable—by only examining radicalized individuals, researchers lack a suitable counterfactual.

Focusing on religious tensions in Kenya, the present article analyzes influential explanations of religious radicalization. An extensive review of the literature coupled with qualitative expert interviews in Kenya allows us to distill salient micro-, meso-, and macro-level explanations of radicalization that aim to explain the recent spike in religious violence. We operationalize and test the resulting hypotheses using survey evidence from the Eastleigh District of Nairobi, Kenya. Eastleigh has in recent years witnessed significant tensions between Christians and Muslims. Al-Shabaab, the East African Islamist terrorist group, uses the neighborhood as a central recruitment ground (Marchal 2009, 394; Shinn 2011).

Our empirical design advances the literature on religious radicalization in three ways. First, we present the first large-scale survey that includes 576 individuals with different degrees of radicalization, allowing us to overcome inferential limitations in previous studies that largely focus on the already radicalized. Second, our study includes both Christian and Muslim as well as male and female respondents, allowing us to tap into the much-discussed question of religious and gender variance that has hitherto received little empirical scrutiny (Speckhard 2008, 995). Third, we simultaneously test a diverse set of salient hypotheses on radicalization among a relatively homogenous sample of young adults. Our study thus provides empirical evidence from a frontline setting, dissecting the explanatory power of micro-, meso-, and macro-level factors in predicting radicalization.

Our findings point to an understanding of radicalization as an individual-level process that is largely unaffected by macro-level influences. In particular, by regressing a measure of radicalization on variables capturing salient theoretical predictions, we find no evidence that traditional explanations of religious radicalization, including economic and political marginalization, exert any impact. Moreover, other popular explanations that receive significant attention in the media—such as an individual’s religion, gender, age, or marital status—are not significant predictors of radicalization, either. Rather, we find that micro-level psychological explanations, above all historically troubled social relations, as well as meso-level process-oriented explanations, including religious identification and exposure to individuals that migrate to Somalia, are strong predictors of radicalization. The evidence thus challenges conventional explanations of radicalization that emphasize political and economic grievances.2 Rather, the evidence highlights that religious radicalization may be driven more by relational circumstances and
ideas. It is thus in line with the “relational turn” that Charles Tilly brought to the study of contentious politics, and, in particular, Tilly’s “ideas approach,” whereby ideas (here: religious beliefs) are most pivotal in explaining violent behavior (Tilly 2003; Alimi 2015).

Religious Radicalization in Kenya: A Brief Overview

Violence perpetrated in the name of religion has been a recurring phenomenon in Kenya for the last two decades. The first major event was the 1998 bombing of the U.S. Embassy in Nairobi by Al-Qaeda, which left over 200 individuals dead (Njenga, Nyamai, and Kigamwa 2004). In recent years, high-profile acts of religious violence have received increasing attention from Western governments, intergovernmental organizations, and the international media.

The Somalia-based terrorist and insurgent group Al-Shabaab Al-Mujahideen (herein Al-Shabaab) is the driving force behind most high-profile attacks. The group justifies its actions in part based on the presence of the Kenyan Armed Forces as part of the African Union peacekeeping mission in Somalia. By framing the Kenyan military presence as equivalent to an invasion by a Christian army, Al-Shabaab has sought to encourage Muslims in Kenya and abroad to take up arms against the Kenyan state.

Al-Shabaab has subjected Kenya’s political and economic stability to significant pressure. The September 2013 attack on Nairobi’s upscale Westgate shopping mall emphasized the potential of religious radicalization to cause extended financial and political upheaval in Africa’s third-largest economy. The attack was overshadowed in terms of the sheer casualty count by the group’s April 2015 assault on Garissa University College, which left 147 individuals dead (British Broadcasting Corporation [BBC] 2015b). The attack had a decidedly religious dimension: attackers separated Muslims and Christians and then killed the latter almost exclusively.

Attacks take place within a broader historical context of tensions between Kenyan Christians and Muslims. One prominent complaint by Muslims is that Kenya’s Christian political elite deliberately takes steps to politically and economically marginalize the Kenyan coast, where most Muslims live, for the benefit of the country’s Christian majority. Such grievances, however, do not always translate into religious tensions. Indeed, the insurgent group known as the Mombasa Republican Council justifies its attacks on the Kenyan state in terms of material and tribal grievances. References to religious identity are largely absent. Still, Al-Shabaab utilizes Kenya’s history of Muslim–Christian tensions in order to mobilize support and justify violence. In doing so, Al-Shabaab uses ideological frames that focus on material grievances in concert with frames using extremist religious interpretations. The resulting violence is often labeled “religious” on the basis of justification and target selection.

In Mombasa, Kenya’s second largest city and a longtime spiritual hub for East African Muslims, religious violence organized by Al-Shabaab cells has shattered the economy and increased tensions among religious groups and between
authorities and the Muslim community. In the Kenyan capital Nairobi, similar dynamics of religious violence have been at work. No Nairobi neighborhood has received more attention than Eastleigh. Known as “Little Mogadishu” for its large Somali immigrant community, the neighborhood was described by The Washington Post as “an incubator of jihad” (Raghavan 2010) for its widespread supply of religious extremist content and Al-Shabaab recruiters embedded in mosques and schools (Botha 2014b, 8).

In twenty semi-structured interviews conducted by the authors in Eastleigh, local interlocutors underlined the decisive role that religion plays in intergroup conflict. One instructive example comes from an interview with a community leader in Eastleigh, who explained the phenomenon of “street debates” which take place in Eastleigh alleys. In the debates, young adults contest, defend, and project the superiority of their religion over the other. For instance, some Muslim youth tell their Christian counterparts that the word Islam means peace (it is a cognate of the Arabic word for peace “salaam”) and thus that Christians should convert to Islam if they are truly peaceful. Such public acts of contention underscore the mistrust and hostility that defines Muslim–Christian relations in Eastleigh. In addition to street-level quarrels, some notorious clerics have been known to consistently incite hatred in their followers (Peter, Wandera, and Jansen 2013, 29).

As a result of these tensions, the Kenyan Anti-Terrorism Police Unit (ATPU) has steadily increased its operational intensity in Eastleigh in ways that have provoked widespread and sometimes violent backlashes from the Muslim community. The ATPU’s focus on the Somali community in particular has led to a series of raids on local residences and religious institutions suspected of facilitating terrorism. In an act that instilled fear and anger within the Somali community, the ATPU detained en masse thousands of Eastleigh Somalis, brought them to a local sports complex, and then conducted interrogations that ultimately resulted in the arrest of a small minority of those rounded up (Anderson and McKnight 2015, 17). Muslims have perceived such acts as tantamount to collective punishment, and several residents told the authors that such ATPU actions resulted in political marginalization likely to propel religious radicalization even further.

Defining Religious Radicalization

This study’s main outcome of interest is the extent to which individuals are religiously radicalized. Because our survey evidence cannot capture the full process of radicalization (Crossett and Spitaletta 2010; Wilner and Dubouloz 2010), we focus on the extent to which individuals endorse radical beliefs. In honing in on one aspect of radicalization, we acknowledge that there is significant scholarly disagreement regarding the meaning of the term and its utility as a concept (Sedgwick 2010; Veldhuis and Staun 2009; Schmid 2013, 17-18). Beyond the core definitional
debate, the usage of the term radicalization has received two broad critiques, that merit discussion.

First, scholars have argued that the study of radicalization implicitly presupposes that radical beliefs are a precondition to violent behavior (Borum 2011, 9). We, therefore, refrain from drawing a link from radical beliefs to violent behavior and thus side with Neumann (2013, 874-76) who argues, that the study of the causes of cognitive radicalization should not be considered as unrelated to the study of behavioral radicalization. Second, several researchers have pointed out that the study of radicalization too often is limited to one side in a two-sided conflict (e.g., Schmid 2013, 18-19). We note that our study focuses on radicalization among both sides of the conflict we study—that is to say, among both Christian and Muslim young adults.

We define the extent of religious radicalization at the level of the individual at a given point in time as support for the use of violence to achieve a religio-political objective. Our definition is in line with other definitions put forth by scholars and government agencies alike, all of which emphasize that radicalization involves the justification of violence to achieve goals (Crossett and Spitaletta 2010; McCauley and Moskalenko 2008; Wilner and Dubouloz 2010).

We use the term religious radicalization for three reasons. First, the term serves a descriptive function: in our study context, individuals express extremist attitudes and behavior toward individuals on the basis of their religious affiliation. Second, the term refers to the origin of the justification for violence. In the Kenyan context and many others (Juergensmeyer 2003; Wiktorowicz 2005), decisions to target members of another group are often on the basis of specific, established, and sometimes “fringe” interpretations of religious doctrine or on the basis of defending one’s religious group. We detail the examples of such behavior in the preceding section on the background of religious radicalization in Kenya. Third, we use the term “religious” to underscore that radicalization often involves events affecting a religious group’s global membership, such as the rise of militant groups or political parties affiliated with Christianity or Islam. We thus consider the phenomenon of “religious radicalization” to be sufficiently large and distinct in ways dissimilar to localized, within-country or within-region “ethnic radicalization” (Horowitz 1985, 227) regarding a particular tribal, linguistic, or caste identity category.

Theoretical Framework

As religiously motivated violence continues to flare across Kenya and other countries, large-scale empirical evidence regarding the determinants of religious radicalization remains sparse. There are several reasons for this scarcity, ranging from definitional issues (Silke 2001; Horgan and Boyle 2008) to the difficulties of gathering primary-sourced data (Crenshaw 1986; Schuurman and Eijkman 2013). This section intends to fill the gap by distilling explanations for religious radicalization,
which are particularly likely to be decisive in the Kenyan context, and putting them under empirical scrutiny in the Empirics section.

The process used to select the hypotheses examined in the study was as follows. In a first step, a review of the literature on the causes of radicalization was conducted (drawing i.a. on Crenshaw 1981; McAllister and Schmid 2011; McCauley and Moskalenko 2008, 2011). Following Brynjar and Skjølberg (2000), the causes of radicalization were classified into micro- and macro-level variables, adding a meso-level to reflect variables and processes that operate at the community level. From this literature, we located about three dozen hypotheses that are plausibly at work in the Kenyan context.

In a second step, we excluded hypotheses relating to enabling factors or permissive conditions (Crenshaw 1981). Enabling or permissive factors, which provide opportunities for terrorism, exhibit very little within-country variation. Variables such as “government capability” or “urbanization” (Crenshaw 1981, 381-82) do not meaningfully vary in a context such as Eastleigh within a given year or even several years. Such factors are best examined by a different research design focusing on city or country-level factors that vary over longer time periods.

In a final step, we sought out to assess the salience of the remaining hypotheses in semi-structured interviews with twenty local experts in Nairobi. Local experts included Christian and Muslim religious clerics, youth activists, academics, development workers, and government officials. During this process, the majority of experts supported the importance of approximately a dozen variables in causing radicalization. Through this process, we arrived at eight hypotheses separated at the macro-, meso-, and micro-levels. Although we by no means conduct a comprehensive test of all salient causes of religious radicalization, our study tests a well-defined set of explanations that are particularly relevant to the Kenyan case.

**Macro-Level: Grievance-Based Explanations**

The first family of theories focuses on macro-level grievance-based explanations that drive individual-level religious radicalization. We group the literature into explanations focusing on economic and political marginalization.

**Economic marginalization.** A widespread belief in public discourse is that poverty increases the risk of radicalization. Academic research has closely investigated the relationship between economic marginalization—conceptualized here as poverty—and support for religious violence. Chiozza (2010), using observational data from the Pew Global Attitudes Survey, finds that in Jordan poverty is associated with support for Islamic terrorism, but that such a relationship is absent in five remaining predominantly Muslim countries (see also Shafiq and Sinno 2010; Chiozza 2010). In a similar empirical analysis spanning fourteen Muslim-
majority countries, Mousseau (2011) finds that the urban poor are most supportive
of Islamist terrorism.

In Kenya, our study context, economic marginalization has been a particularly
prominent explanation for religious radicalization. A recent report by the Interna-
tional Crisis Group emphasizes the role of socioeconomic marginalization in Ken-
ya’s deteriorating security environment (International Crisis Group 2014, 2). Such
commentary also features in international media accounts, with one recent article by
Al Jazeera stating that Kenyan Muslims may support Al-Shabaab for “the promise
of a steady income” (Swanson 2014). Our own semi-structured interviews with
community leaders in Eastleigh, Nairobi, emphasized the salience of this argument
among local observers as well.

The relationship between economic hardship and radicalization, however, is
contested by alternate studies. Survey research from Pakistan finds that individ-
uals from the middle class are more likely to support terrorism than the poor
(Blair et al. 2013). Fair and Shepherd (2006) use survey data of over 7,000
respondents from Muslim-majority countries to demonstrate that the very poor
are less likely to support terrorism than other economic groups (see also Jo
2012). One of the few large empirical studies analyzing tensions within Chris-
tian communities is provided by Blake (2015). Focusing on Northern Ireland,
Blake shows that among Protestants participation in religious parades—which
historically have led to violent clashes with Catholics—is not predicted by
individuals’ education level, which is arguably related to one’s economic
standing.

The literature is thus ambiguous as to the expected relationship between eco-
nomic marginalization and religious radicalization. We articulate and test the ver-
sion of this relationship that is most prominent in popular accounts.

**Hypothesis 1:** Individuals with higher levels of economic marginalization
exhibit higher levels of religious radicalization.

**Political marginalization.** A second prominent argument in this macro-level research
tradition argues that political marginalization leads to religious radicalization.
Hegghammer (2006, 43-44), in a study of radicalization in Saudi Arabia, notes that
“certain tribes suffer political marginalization [. . . ] that makes them prone to Isla-
mist radicalism.” Focusing on Morocco, Pargeter (2009, 1036-38) argues that polit-
ically marginalized towns are more likely than nonpolitically marginalized towns to
serve as breeding grounds and recruitment streams for Islamist extremists. Qualita-
tive accounts by Lombardi, Eman, and Chin (2014, 14-16) suggest that politically
marginalized individuals lack trust in police and administrative officials, which may
increase radicalization.

A similar argument is made in the context of Kenya. Somalis in the neighborhood
of Eastleigh, as well as the general Muslim population at the coast, have complained
about unequal representation in the political process. Many Kenyan Muslims have
argued that the global war on terrorism has been used as a pretext to justify political marginalization (Rosenau 2005, 9). Radical religious clerics associated with Al-Shabaab have specifically exploited political marginalization in their propaganda campaign as a means of increasing support for violence toward Christians (Botha 2014a, 905).

**Hypothesis 2:** Individuals with higher levels of political marginalization exhibit higher levels of religious radicalization.

**Meso-Level: Process-Oriented Explanations**

The second family of theories focuses on meso-level process-oriented explanations. We group the literature into explanations focusing on religiosity, religious conversion, and exposure to radical networks.

**Religiosity.** The first prominent argument in the meso-level research tradition points out the importance of religiosity. Whether religiosity expressed by perpetrators of religious violence is a “cover” for underlying grievances or a genuine motivation for extremism remains a controversial question (Roy and Volk 1996). Juergensmeyer (2003) examines perpetrators of religious violence belonging to different religions, highlighting that religiosity should not simply be dismissed as a “charade” when assessing the motives of perpetrators of religious violence. Similarly, Brubaker (2015, 12) argues that attachment to religion may lead to violence because religion can “nurture powerful emotions, […] radically devalue the existing order […], and intensify threats and dangers” by linking “cognitive definitions of ultimate reality with structures of feeling and obligation.”

Religiosity, however, is a widely contested concept, not least because its operationalization is debated. In this study, we measure the concept in two distinct ways: participation in public religious practices and religious identification.

Regarding the first item—participation in public religious practices—we focus on attendance in public prayer services. This allows us to engage with studies that use prayer participation as a proxy for religiosity. In addition, it allows us to capture an aspect of religiosity that is salient for members of both faiths examined here. The extant literature reflects the contested debate over the role of religious participation in radicalization. Observational evidence from Pakistan and Arab countries finds that prayer observance by Muslims does not predict support for radical Islamist violence (Fair, Malhotra, and Shapiro 2012; Tessler and Nachtwey 1998). In contrast, Ginges, Hansen, and Norenzayan (2009) find that attendance at religious services strongly predicts support among Palestinian Muslims for suicide attacks.

Regarding the second item—religious identification—we focus on the level of attachment that respondents hold toward their religious identity relative to other salient identity categories. We measure religious identification by asking subjects
whether or not he or she most identifies with his or her religious group as opposed to a list of salient alternative identity categories. In our local context, we identified such categories for Kenyan Christians and Muslims in Nairobi as tribal identity, nationality, age-group, and economic group.\textsuperscript{4} We test this second component of religiosity to advance an ongoing debate in the literature. In a study of 1,000 British Muslims, Tausch, Spears, and Christ (2010) find that attachment to British identity predicts lower support for the July 7, 2005, terrorist attacks in London, but that higher attachment to a Muslim identity does not predict higher support for the attacks. In a lab experiment with German Muslims, Fischer, Greitemeyer, and Kastenmüller (2007, 380) find that higher religious identification increases support for hypothetical terrorist attacks committed by German Christians but not for such acts committed by German Muslim.

Our qualitative assessment of the relationship between religiosity and extremism in Eastleigh was mixed. Community leaders and religious youth offered differing perspectives, with some insisting that greater identification with either Islam or Christianity would signify greater association with the desire for peace toward others. Other interlocutors suggested that greater religious identification in the Kenyan context, where many members of both Christianity and Islam perceive their groups to be under threat, would signify a confrontational posture toward the out-group.\textsuperscript{5} Empirical literature on support for Al Shabaab among Kenyan Muslims, though limited in scope, emphasizes the importance of religion to those who joined the terrorist group (Botha 2014\textsuperscript{a}).

In testing the hypothesis for religiosity and its two alternate measurements, we test the version of the hypothesis as it is commonly stated:

**Hypothesis 3:** Individuals with higher levels of religiosity exhibit higher levels of radicalization.

**Conversion.** A second line of process-oriented explanations concerns the effects of religious conversion. In recent years, government officials, terrorism analysts, and journalists alike have given increasing attention to the role of converts to a religion in the commission of acts of religious violence (Uhlmann 2008; Roy 2008). With reference to new converts to Islam, analysts have highlighted the presence of converts in groups ranging from the Islamic State to Al-Qaeda to unaffiliated individuals operating as “lone-wolves.” Simcox, Hannah, and Ahmed (2010), for example, note that in the United Kingdom, 27 percent of Islamist terrorist incidents in the period from 2001 to 2013 were committed by Muslim converts who are believed to represent some 2 percent of the overall Muslim population. Other studies also find that Muslim converts have been involved in relatively large percentages of terrorism cases in Canada and Western Europe (Flower and Birkett 2014; van San 2015).

Several prominent accounts explain why conversion may increase radicalization. A first line of inquiry emphasizes unmet expectations. Individuals who convert may
not receive the embrace that they expect to receive from their new coreligionists. Consequently, they may be drawn to adopt more politically extreme interpretations of their religion in order to signal to the public their belonging to the new religious community (Moosavi 2013; Karagiannis 2012, 102; Bartoszewicz 2013, 17; Cesari 2008). A second account emphasizes intolerance that results from converts deciding to reject their old faith. In a study of converts to Protestantism in Catholic-majority communities, Gross (2003, 348) argues that conversion marked a “rejection of the past” including a reconfiguration of social ties that was often associated with an overly critical attitude of one’s previous faith (see also Bartoszewicz 2014; van San 2015). Conversion may thus cause intolerance toward the rejected faith, bringing an individual closer to adopting radical views.

In Kenya, media reports highlight the role of new converts to Islam, including women, in perpetrating terrorist attacks on behalf of Al-Shabaab (e.g., BBC 2015a). Our qualitative evidence, however, yielded mixed evidence. Interviewees pointed out that—although conversion happens frequently—it’s effects on radicalization are difficult to predict. We thus test the following hypothesis:

**Hypothesis 4:** Religious converts exhibit higher levels of radicalization.

**Networks.** A third line of process-oriented explanations emphasizes the role of peer networks in facilitating religious radicalization. Behavioral scientists have gathered evidence in Europe that adolescents involved in illegal political behavior increase their peers’ levels of illegal political behavior (Dahl and Zalk 2014). Other studies have suggested that peer networks transmit radical religious beliefs. For instance, Munson (2008) demonstrated that Gush Emunim—an Israeli right-wing movement—exploited political mobilizing structures to further its program. In an analysis of extremist political groups in Italy and Germany, della Porta (2006) finds that personal ties to radicals increased radical behavior.

With regard to Islamic extremism, Sageman (2004) presented one of the earliest and most extensive accounts on the network effects within Al-Qaeda. Sageman argues that terrorist networks, even when self-organized and decentralized, remain remarkably robust and effective at recruiting and radicalizing young adults. Similarly, Wiktorowicz (2005) uses a snow-ball sample to demonstrate that members of a Salafist group in the United Kingdom were motivated by active social networks. In his words, “[E]xposure to radicals typically results from movement outreach and social networks that tie seekers to the movement through personal relationships” (Wiktorowicz 2005, 5).

So too in Kenya, Botha (2014b) finds that the majority of a sample of former Al-Shabaab members cited their friends’ involvement in the group as their primary motive for joining the organization. In our own interviews, Kenyan religious leaders, youth activists, and police officers emphasized the importance of peer groups in fostering religious radicalization. Radicalized young adults appeared to transmit their beliefs to nonradicalized peers in venues that permit such sensitive discussions,
including particular religious institutions and cafes. Within Eastleigh, young adults who know individuals who have gone to Somalia may be at particular risk of radicalization. Somalia-bound migrants are likely to possess propaganda materials and extremist views that could persuade those they know to adopt pro-violence positions. For reasons discussed later, we therefore focus the process-oriented network hypothesis on exposure to Somali migrants.

**Hypothesis 5:** Individuals who know Somalia-bound migrants will exhibit higher levels of radicalization.

**Psychological Explanations**

A third and final family of explanations focuses on micro-level psychological factors that drive individual-level religious radicalization. We group the literature into explanations focusing on negative catalyst events, historically troubled social relations, and prior exposure to political violence. Before delving into these determinants, we note, however, that we leave out one family of psychological explanations—pathological theories—given that they have received stark scholarly criticism (Corrado 1981; Silke 1998, 51; Altier, Thoroughgood, and Horgan 2014).

**Negative catalyst events.** Several scholars of religious violence suggest a link between negative “catalyst events” and religious radicalization. Silke, studying European Jihadism, notes that such events “provide a strong sense of outrage and a powerful psychological desire for revenge and retribution” (2008, 114). Silke mostly focuses on politically salient events such as abuses of Muslim populations that generate feelings of revenge based on a shared identity among co-believers. Yet, negative catalyst events also work on the individual-level. For example, Al-Lami (2009), studying female suicide bombers in Iraq, demonstrates that most fighters had previously witnessed the death of family members. Similarly, Kushner (1996) demonstrates that potential suicide bombers nearly always have experienced the death, torture, or abuse of a friend or relative by the perceived enemy.

Our qualitative interviews gave numerous examples that negative catalyst events led individuals toward the adoption of more radical positions. A popular argument was that such events caused an identity crisis. The resulting vacuum led the respective Christian or Muslim believer to adopt more extreme positions. A similar argument is given by Wiktorowicz. In his study of the Al-Muhajiroun group, the author argues that individuals who experience a cognitive opening “constitute a broad potential recruitment pool” (2005, 85). As was described above, in 2014, Kenya’s Muslim community experienced a particularly salient negative event, which likely caused such a cognitive opening, when police units arrested more than 1,000 people in Eastleigh and elsewhere. Among Christians, a prominent negative event
recounted in several interviews was Muslim riots in 2014, which, in turn, were incited by the killing of a Muslim cleric by government forces.

**Hypothesis 6:** Individuals that have experienced negative catalyst events exhibit higher levels of radicalization.

**Troubled social relations.** A second line of research on psychological variables argues that historically troubled relations with parents and friends can increase the likelihood of support for religious violence. Several scholars of psychiatry present evidence that turbulent relations with parents or close friends in an individual’s formative years can create emotional damage that weakens one’s self-concept (Akhtar 1999; Borum 2004).

In one prominent reading from studies of terrorism, such individuals seek to find an outside enemy on whom to project their weaknesses. Post (1990, 27) for instance, states that terrorists are “unable to face their own inadequacies” and thus “need a target to blame,” making them particularly attracted to the polarizing rhetoric of extremists. A study by German social scientists finds that 79 percent of a sample of 227 left-wing terrorists from the June 2 Movement had “severe conflict” with their families and described their relationship with their fathers in hostile terms (Claessens et al. 1982). More recently, qualitative accounts from media and research organizations have suggested a relationship between troubled family histories and inclination toward terrorist violence. One prominent example is the Tsarnaev brothers, the suspected perpetrators of the 2015 Boston Marathon bombings, whose actions may have been triggered by emotional distress after their parents’ divorce.

Similar accounts are salient in the context of religious radicalization in Kenya. In marginalized communities like Eastleigh, Christian and Muslim youth are often not raised by both parents. Interviewees described typical scenarios where young men and women spend more time with peers and at religious institutions than with their parents, who may be absent as a result of conflict with children, working multiple jobs, or in some cases, imprisonment or death. Several community leaders and parents in Eastleigh explained that such troubled relationships drive individuals to endorse radical beliefs and engage in violent political behavior as a means of finding purpose and stability in life. Such explanations are seen to account for the decision by members of terrorist groups to not inform their parents of their decision. For example, Botha’s (2015) study of a sample of former Al-Shabaab members found that only 11 percent informed their parents of their decision to join the group.

**Hypothesis 7:** Individuals with historically troubled social relations exhibit higher levels of radicalization.

**Violence exposure.** The third and final argument in the psychological literature regarding the micro-level determinants of religious radicalization relates prior exposure to political violence. This specific hypothesis is part of a broader theory in social psychology known as terror management theory (TMT). TMT holds that human
awareness of the finality and inevitability of death establishes a potential for entering an individual state of terror. Individuals constrain this possibility by maintaining and complying with an internalized worldview. When individuals come into contact with individuals who hold alternate worldviews, they risk entering into a state of threat that causes an anxiety, which they seek to reduce by attempting to convert the adherents of competing worldviews or by attacking them (Pyszczynski, Abdollahi, et al. 2006, 526). Social psychologists have found experimental evidence in fourteen countries that support various TMT hypotheses (Pyszczynski, Greenberg, et al. 2006).

One particular hypothesis of interest concerns what is termed mortality salience, which refers to the process by which the concept of death is made more accessible and relevant in an individual’s mind. In this reading, reminders of death can lead people to punish violators of their own internally held norms and increase their dislike of individuals with alternate world-views (Arndt et al. 1997). Evidence on morality salience abounds on issues related to immigration in Europe and the Middle East (Ochsmann and Mathy 1994; Mikulincer and Florian 1998). Recent studies have found that simply reminding individuals about death can induce support for political violence toward an out-group (Pyszczynski, Greenberg, et al. 2006).

Given the operations of the ATPU in Eastleigh with high numbers of detentions and raids on suspected radical Muslim clerics, exposure to violence is widespread. In the past ten years, young Kenyans have been directly exposed to an increasing level of violent acts committed in the name of religion. The TMT hypothesis on reminders of death suggests that exposure to such violence may itself spur radicalization by increasing an individual’s hatred toward the religious out-group.

**Hypothesis 8:** Individuals that have witnessed acts of political violence exhibit higher levels of radicalization.

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**Empirics**

**Sampling**

To test the extent to which the eight hypotheses are correlated with religious radicalization, we implemented a survey between July 2015 and August 2015 in the Eastleigh suburb of Kenya’s capital Nairobi (see map in Figure 1). We obtained a random sample of 576 young adults, a relatively small size owing to local conditions and the highly sensitive nature of the survey. The sample was restricted to individuals between eighteen and thirty-five years of age—the age bracket most plagued by religious radicalization (Weine et al. 2009). To reflect a recent trend of increasing female involvement in extremist groups (Speckhard 2008, 995), the sample included an equal share of men and women as well as Christians and Muslims. Our team of
enumerators, all of whom were local Eastleigh residents, consisted of eight individuals balanced by gender and religion.

To ensure a representative sample, our sampling strategy included several levels of randomization. First, enumerators were randomly assigned to blocks within the neighborhood. Second, enumerators were given a randomization dictionary that prespecified three salient covariates of the next respondent: the age bracket, the religion, and the gender. This was to ensure that equal shares of these covariates were obtained, while simultaneously balancing enumerator characteristics across respondent characteristics. Third, enumerators were instructed to find the next \( x \)th person (a randomly generated integer ranging from 1 to 4) that fit these characteristics, thus increasing the randomness of the sampling strategy.

Enumerators were instructed to exclusively sample respondents on the streets and to conduct interviews in places that granted an appropriate level of privacy, such as coffee shops and small restaurants. We decided against a household-based sampling strategy for three reasons. First, reliable address information is not available for Eastleigh; estimates on the precise number of inhabitants range from 174,389 to 348,778 (Kenya Open Data 2009; Mudiari 2010). Second, we wanted to ensure that young adults could voice their opinions without parental oversight. Third, our

**Figure 1.** Location of Eastleigh.
contacts on the ground advised that sampling on the streets would be safer for enumerators than sampling within homes, particularly for individuals with a significant degree of religious radicalization.

About 2.3 percent of the outcome measures are missing. Thirty-eight of all approached individuals did not want to participate in the survey (five female Christians, three female Muslims, twenty male Christians, and ten male Muslims), producing a nonresponse rate of 6.7 percent. We discuss the ethical concerns of conducting surveys on religious radicalization in Online Appendix (section 1.5).

The full table of descriptive statistics of the sample can be found in Online Appendix (section 1.1.) About half of the Christian and Muslim samples are married (married; 44 percent of Muslims and 45 percent of Christians). Both samples included a relatively high number of converts (convert; 15 percent of Muslims and 8 percent of Christians). While the number is slightly higher as compared with developed countries (Barro, Hwang, and McCleary 2010), it is not unexpected, given the thriving religious activism in Nairobi (McClendon and Riedl 2016). Income in Kenyan Shillings (income) is also wellbalanced (KES 6869 for Muslims and KES 6684 for Christians). About half of the sample had regular jobs (employed; 44 percent of Muslims and 51 percent of Christians). Regarding the tribal background, the plurality of Muslims were Somali (31 percent), while the plurality of Christians came mostly from the Kikuyu tribe (25 percent).

**Radicalization Measure**

The main outcome of the empirical analysis is the extent to which respondents can be considered religiously radicalized. In constructing such a measure of religious radicalization for the Christian and Muslim subsamples, two points merit discussion.

First, any measurement of radicalization runs the risk of underreporting due to the sensitive nature of the topic. The continuing activities of Kenya’s ATPU in Eastleigh against Al-Shabaab made it impossible to measure direct support for terrorism. Our radicalization instruments for Christians and Muslims, therefore, measure individual-level support for radical groups outside of the immediate Eastleigh community. In particular, for Muslims, we measured support for the Islamic State in Iraq and Syria. For Christians, who lacked a similar terrorist group to support, we measured support for a statement by priests in the coastal town Mombasa, who had publicly stated the need to take up arms to defend themselves against Muslim fundamentalists (Mwakio 2015).

To avoid priming Christian subjects on defensive violence, prime Christian subjects on defensive violence, we phrased the question in terms of willingness to use violence in much the same way as we did for the question posed to Muslim subjects. Nonetheless, we acknowledge that some Christians may have interpreted the question as support for the use of violence in defense. Even if this was the case, however, the share of Christians who interpreted the question as support for defensive violence was likely similar to the share of Muslims who interpreted the act of supporting the
Islamic State as support for defensive violence. We consequently maintain our focus
on support for violence per se and make no distinction between support for offensive
versus defensive violence. We also analyze the Christian and Muslim sample
separately since the measures are not perfectly symmetric.

Second, we added a hypothetical external religious endorser to both radicalization
measures in order to simulate radical statements often made by extremist religious
leaders (Rosenau 2005) as well as to reduce backlash to enumerators. Below we quote
the instruments used to measure radicalization for both Christians and Muslims.

**Muslim:** Imagine that a Kenyan Imam says that all Kenyan Muslims should pledge
loyalty to the Islamic State in Iraq and Syria. To what extent do you agree
with this statement?

**Christian:** Imagine that a Christian priest says that all Kenyan Christians should be
willing to arm to fight Islamic fundamentalists. To what extent do you
agree with this statement?

Muslim subjects were asked about whether they supported a cleric’s call to pledge
loyalty to a terrorist group, while Christian subjects were asked whether their supported
a cleric’s call to be willing to fight Islamic fundamentalists. We argue that the measure
for Muslim subjects also proxied support for violence, as the concept of pledging loyalty
(Arabic: [sing.]: *baya*; [pl.]: *baya’t*) to a militant group is explained as a prominent way
in which extremists express support for violence (Weiss and Hassan 2016; McCants
2015). Our interviews with Eastleigh youth and community leaders clarified that the act
of pledging allegiance to the group signifies an individual’s readiness to use violence.
For this reason, we are confident that the Muslim subjects in our sample processed and
understood the act of pledging loyalty to the Islamic State as necessarily involving an
endorsement of the use of violence toward nonbelievers.

In the right box of Figure 2, we plot the raw data of the radicalization measure,
which ranges from 1 (*totally disagree*) to 7 (*totally agree*). As one would expect, the
vast majority totally disagree with the statements across both religions (68 percent of
Christians and 60 percent of Muslims, respectively). Nonetheless, there is a consider-
able portion of respondents that do not disagree with the statements (6 percent
among Christians and 21 percent among Muslims). Given the volatility of religious
tensions in Eastleigh (notably, the gruesome Garissa shootings happened three
months prior to the survey), the left box in Figure 1 plots the radicalization measure
over the three-week surveying period, showcasing a relatively stable pattern. Over-
all, the results lend credence to the media portrayal of Eastleigh as a neighborhood
with significant religious radicalization.

**Results**

To test our hypotheses, we regress the radicalization measure on the operationaliza-
tion of our eight hypotheses, which are discussed below. We split our sample into
Christians and Muslims but also estimate models for the full sample. For ease of interpretation, we use an ordinary least squares regression model. All models control for the covariates listed in Online Appendix Table 1.

**Macro-Level: Grievances**

**Economic marginalization.** First, we discuss macro-level grievances. Our first hypothesis is that individuals are more likely to radicalize if economically marginalized. We operationalize economic marginalization using an index of four survey items. First, we asked individuals whether they were employed (employed), which 47 percent of the sample were. Second, we asked individuals about their monthly income in Kenyan Shillings (income). On average, individuals earned KES 6560 or about US$64 per month. Third, we recorded whether individuals had any income (any income). Thirty-nine percent of the sample reported no income. Last, we asked people to what degree they felt that they had a chance of becoming wealthy in Kenya. The variable was measured on a scale from 1, *totally disagree*, to 7, *totally agree* (economic prospects). Respondents, on average, scored 5.4 points on this scale, that is, they were rather disenchanted with their economic prospects. We standardize all four variables, taking the natural logarithm of the income variable, and average them to generate an index of economic marginalization (**economic marginalization index**; Cronbach’s $\alpha$ of .82), which ranges from 0 to 5.3.\(^\text{10}\)

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**Figure 2.** Radicalization measure. The left figure plots the radicalization measure across Muslims and Christians ordered by the interview date. The right figure presents the histogram of the radicalization measure.

Christians and Muslims but also estimate models for the full sample. For ease of interpretation, we use an ordinary least squares regression model. All models control for the covariates listed in Online Appendix Table 1.
In Table 1, we regress the radicalization measure on all explanatory variables and indexes. We find that economic marginalization is not a significant predictor of radicalization, neither for the full sample nor for any of the religious subsamples. Model 1 estimates the full sample, while models 2 and 3 restrict the sample to Muslims and Christians, respectively. Across all the models, the economic marginalization index has a negligible relation with the radicalization measure. In particular, for the Muslim and Christian samples, the effect size varies between 0.03 for Muslims and 0.02 for Christians. In Online Appendix Table 2, we present models where we disaggregate all indexes in order to assess to what degree the individual index items predict radicalization. The models demonstrate that none of the four items in the economic marginalization index are significantly correlated with radicalization. This further underlines that macro-level economic variables are poor predictors of religious radicalization.

Political marginalization. Our second hypothesis is that individuals are more likely to radicalize when politically marginalized. We operationalize political marginalization using an index of three survey items. First, respondents were asked whether they planned to vote in the next election (turnout). On average, 82 percent of the sample affirmed the question. Second, we asked respondents to what degree they felt that the Kenyan government represented their interests (1–7 scale, representation). Respondents were ambivalent about representativeness with an average of 4.3 points. Third, we asked respondents to what degree they felt that they would be on the losing side in Kenyan politics in the coming years. The variable, which ranges from 1 (yes, definitely) to 5 (no, definitely not) scored an average of 2.2 points (political prospects). Subjects were, hence, rather skeptical about their political prospects. Again, we standardize the three variables and average them to generate an index of political marginalization (political marginalization index; Cronbach’s $\alpha$ .57), which ranges from 1 to 5.

Table 1 demonstrates that there is no significant correlation between political marginalization and radicalization among either sample. We note, however, that the effect sizes are substantially bigger as compared to the economic marginalization coefficients. Thus, while the evidence showcases that a macro-level phenomenon like political marginalization may exert little impact on religious radicalization, it is statistically a more salient place to look for answers than economic marginalization. While the effect sizes are bigger for the Muslim subsample, they are not significant. The null finding is buttressed when disaggregating the index into its parts (Online Appendix Table 2).

Meso-Level: Processes

Religiosity. Next, we turn to meso-level process-oriented explanations. Our third hypothesis states that individuals with higher levels of religiosity are more likely to radicalize. We use two items to measure religiosity. First, we recorded whether
respondents frequent their respective house of worship at least once a month (attendance). Because of diverging praying practices, 80 percent of Muslim respondents stated to visit their Mosque at least once a month, while this number is 26 percent for Christian respondents. Second, we gave respondents a list of salient identity categories (religion, ethnicity, nationality, and so on), asked them which label best described them, and recorded whenever religion was put as the first category. This measure, in our view, captures religious identification (identification), which 15 percent of the overall sample put as number 1. Again, we standardized both instruments and combined them to create an index of religiosity (religiosity index, Cronbach’s $\alpha$.30), which ranges from 0 to 3.  

We find that the religiosity index correlates significantly with religious radicalization. The relationship is particularly strong for the Muslim subsample and cedes to be significant in the Christian subsample. In particular, a one-unit change in the religiosity index increases the radicalization index by about 1 point in the Muslim sample, and by about 0.4 points in the Christian sample. Given that the index has a low $\alpha$, in Online Appendix Table 2, we split up the index into its components.

### Table 1. Determinants of Radicalization.

<table>
<thead>
<tr>
<th>Independent variables and covariates</th>
<th>Outcome: radicalization (1–7)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
</tr>
<tr>
<td></td>
<td>Full sample</td>
</tr>
<tr>
<td>Macro-level: Grievances</td>
<td></td>
</tr>
<tr>
<td>Economic marginalization index</td>
<td>$-0.011 (.041)$</td>
</tr>
<tr>
<td>Political marginalization index</td>
<td>$0.153 (.081)$</td>
</tr>
<tr>
<td>Mesolevel: Processes</td>
<td></td>
</tr>
<tr>
<td>Religiosity index</td>
<td>$0.648^{**} (.197)$</td>
</tr>
<tr>
<td>Convert</td>
<td>$0.020 (.184)$</td>
</tr>
<tr>
<td>Knows Somali migrant</td>
<td>$0.476^{***} (.137)$</td>
</tr>
<tr>
<td>Microlevel: Psychology</td>
<td></td>
</tr>
<tr>
<td>Negative catalyst events index</td>
<td>$0.495 (.404)$</td>
</tr>
<tr>
<td>Troubled social relations index</td>
<td>$0.473^{***} (.106)$</td>
</tr>
<tr>
<td>Violence exposure index</td>
<td>$0.162 (.154)$</td>
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<tr>
<td>Covariates</td>
<td></td>
</tr>
<tr>
<td>Muslim</td>
<td>$0.192 (.144)$</td>
</tr>
<tr>
<td>Male</td>
<td>$0.006 (.119)$</td>
</tr>
<tr>
<td>Age</td>
<td>$-0.001 (.015)$</td>
</tr>
<tr>
<td>Married</td>
<td>$-0.003 (.135)$</td>
</tr>
<tr>
<td>Observations</td>
<td>572</td>
</tr>
</tbody>
</table>

Note: Ordinary least squares regressions. Standard errors in parentheses.

*p < .05.

**p < .01.

***p < .001.

Therefore, Table 1 displays the results.
Interestingly, while both items of religiosity are positively associated with radicalization, the identification measure is the strongest predictor—a finding that holds across both Christians and Muslims. This finding thus challenges the studies cited above, which argue that religious identification does not predict support for violence (e.g., Fair, Malhotra, and Shapiro 2012). While we stress that further empirical inquiry on this important debate is necessary, we interpret the statistical correlation as supplementing accounts from several of our semi-structured interviews that highlight the existence of a causal relationship between intense attachment to religious identity and religious radicalization.

**Conversion.** Our fourth hypothesis states that religious converts exhibit higher levels of radicalization. We use a single survey item to measure conversion. In particular, respondents were asked whether they were born into the religion they claimed to be a member of (convert). Roughly, 15 percent of Muslims and 8 percent of Christians are converts, respectively.

The coefficients of the convert variable in Table 1 demonstrates that there is no significant correlation between conversion and radicalization. The estimates are close to zero for the full sample as well as the Muslim subsample. For Christians, the coefficient is slightly higher (0.24), but statistically insignificant. Reflecting the conflicting theoretical predictions regarding religious conversion, we interpret this finding as providing no support for the hypothesized relationship between conversion and religious radicalization.

Even still, we believe that the convert percentage in our sample reflects notable dynamics regarding religious identity in Eastleigh. Several Eastleigh community leaders told us that they believed the convert percentage rate at least in part revealed the influence of religious proselytizers in persuading individuals to change their religious affiliation. Other interlocutors told us that the convert rate may underscore the importance that many young adults assign to religious identity as a means of overcoming personal obstacles and responding to political events.

**Networks.** The fifth hypothesis highlights the salience of networks and peer groups in facilitating religious radicalization. Given the inherent difficulty in operationalizing exposure to radicalized networks, we singled out one particularly salient peer group radicalization mechanism. Several experts highlighted that within Eastleigh’s Muslim community, exposure to an individual who had traveled to Somalia was an important determinant of radicalization. Personal connection to a Somali migrant was an important determinant of radicalization. Connections to Somalia are a sensitive topic in Eastleigh. We therefore asked all respondents a single open-ended question whether they knew “anyone—a friend or someone else’s friend—who has gone abroad.” If the question was affirmed, respondents were further asked what country the person had gone to. We then created a variable that records whether the country was Somalia (knows Somali migrant), which was affirmed by 31 percent of Christians and 22 percent of Muslims.
As can be seen in Table 1, exposure to Somali migrants is a strong predictor of radicalization in the Muslim subsample but not for Christian subjects who by virtue of their faith may be less affected by such exposure. For Muslims, knowing a Somali migrant is associated with a 0.7 point increase on the radicalization scale. Although our measure of peer effects is a simple measure, the question was administered in an unobtrusive way and exhibits significant variation across the sample of Muslims, providing some insights into the import of networks in fostering radicalization.

**Micro-Level: Psychology**

**Negative catalyst events.** Finally, we turn to micro-level psychological determinants of religious radicalization. Our sixth hypothesis states that individuals who experience negative catalyst events are more likely to radicalize. Six items were used to measure negative catalyst events in the past year. First, we asked respondents whether they had lost a family member (lost relative), with 42 percent of respondents answering in the affirmative. Second, we asked respondents if they had lost their job (lost job), which happened to 13 percent. Third, we asked respondents whether they had been arrested by the police (arrest), which happened to 22 percent. Fourth, we asked whether respondents’ house of worship had been raided by security forces (raid), which happened to 3 percent of respondents. Fourth, we asked whether respondents had stopped talking to their parents (anomie), which 2 percent reported to be true. Fifth, we asked whether the person they loved had stopped talking to them (lost partner), which happened to 22 percent. Finally, we asked respondents whether a friend of them had left the country (emigration), which 30 percent affirmed. The six items were standardized and combined to create an index of negative catalyst events (negative catalyst events index, Cronbach’s α .34), which ranges from 0 to 1.

As can be seen in Table 1, negative catalyst events do not significantly predict radicalization. Yet, the coefficients—particularly in the Muslim subsample—are rather high. In Online Appendix Table 2, we split the index into its components. We find that for Muslims, losing a relative and losing one’s job is a statistically significant predictor of religious radicalization. While other variables yield large effects, too (notably, a raid in one’s house of worship, and cutting off relations with one’s parents), they are all measured with significant noise due to very few observations. At a minimum however, the effect sizes can guide future research with even larger sample sizes in promising directions. All other variables are not statistically linked to radicalization.

**Troubled social relations.** The seventh hypothesis states that individuals with historically troubled social relations are more likely to radicalize. We operationalize historically troubled social relations with three retrospective survey items. First, respondents were asked about the strength of their relationship with their mother (maternal relationship), which ranged from 1, very strong, to 5, very weak.
average, respondents had a very strong relationship with their mother (1.3). Similarly, we asked respondents about the strength of their relationship with their father ( paternal relationship ) with an average strength of 1.7. Third, we asked respondents to what degree they were happy with the respect they had received from friends and family, ranging from 1, very pleased, to 5, very unpleased ( respect ). Respondents seemed rather happy with their retrospective state of family relationships with an average of 1.7. We standardized all three variables to create an index of historically troubled social relations ( troubled social relations index , Cronbach’s α .60), which ranges from 0 to 5.14

In Table 1, we demonstrate that historically troubled social relations are significantly correlated with radicalization. This relationship holds for the full sample as well as for the Christian and Muslim subsamples. A one point increase in the troubled families index results in a 0.6 point increase in the radicalization measure for Muslims and a 0.4 point increase for Christians, respectively. When splitting the index into its components (Online Appendix Table 2), we note that no individual item is a significant predictor, aside from the respect variable in the combined sample. Overall, the finding demonstrates that weak family and social relations make individuals susceptible to radicalization, as was pointed by many qualitative experts.

**Violence exposure.** Our eighth and final hypothesis states that individuals who have witnessed acts of political violence are more likely to radicalize. We operationalize violence exposure using two survey items. First, respondents were asked whether they had witnessed interreligious violence, with 31 percent of respondents replying in the affirmative ( interreligious violence ). Second, we asked respondents whether they had witnessed violence between Muslims and the government ( similar violence between Christians and the government has not been reported in the media; State-Muslim violence ). Forty-one percent of the sample claim to have witnessed such violence. Both instruments were standardized and added into an index of violence exposure ( violence exposure index , Cronbach’s α .59), which ranges from 0 to 1.15

We find no statistically significant evidence that past exposure to violence increases radicalization (Table 1). While the effect is around 0.4 in the Muslim subsample, it is close to 0 for Christians—both effects are not statistically significant. When splitting up the index into its two components (Online Appendix Table 2), neither variable exhibits meaningful predictive power.

**Discussion and Conclusion**

In this article, we systematically tested a variety of hypotheses on religious radicalization. Focusing on interreligious tensions in Kenya, we distilled salient micro-, meso-, and macro-level theories that try to account for the recent spike in religious radicalization. Using an empirical strategy that compares Christian and Muslim
respondents with differing degrees of religious radicalization, we found no evidence that radicalization is predicted by macro-level political or economic grievances or by religious conversion. Rather, we demonstrated that radicalization is most strongly predicted by psychological determinants, above all historically troubled social relations, and process-oriented factors, particularly high levels of religiosity and exposure to radical networks.

The findings give rise to a model of radicalization that emphasizes process-oriented and psychological factors rather than macro-level political or economic grievances. The model is in line with the relational turn Charles Tilly brought to the study of contentious politics, and, in particular, Tilly’s ideas approach whereby ideas are most pivotal in explaining violent behavior. Given our sample and study site, we believe that such a relational, idea-driven model is highly relevant for understanding patterns of radicalization among marginalized urban young adults—the primary subsample of interest in the field of radicalization studies. We emphasize four main findings.

First, our research emphasizes the importance of process-oriented factors in explaining variation in religious radicalization. Above all, we found that religiosity defined as religious identification strongly predicts higher radicalization. The evidence challenges several other studies that find no relationship between religiosity and support for violence (e.g., Fair, Malhotra, and Shapiro 2012; Tessler and Nachtwey 1998) or religious identification and radicalization (Tausch, Spears, and Christ 2010; Fischer, Greitemeyer, and Kastenmüller 2007). Given that the finding holds across both Christian and Muslim respondents, we add to a research body that has shown religiosity to be conducive to violence among Muslim samples without considering other religious groups (e.g., Ginges, Hansen, and Norenzayan 2009; Cinnirella et al. 2010). Our approach improved upon what we perceived to be a limitation in previous studies that more narrowly defined religiosity in terms of the performance of religious practices. We argue for a more rigorous conceptualization of religiosity, drawing on social psychological approaches (Ysseldyk, Matheson, and Anisman 2010) to demonstrate that an individual’s level of religiosity cannot simply be understood by practice but also by beliefs, in this case, about the relative importance of religious identity. Future research should more precisely examine the mechanisms by which religiosity affects radicalization. Experimental studies that seek to isolate the effect of the content of religious information on support for violence may be particularly promising in this endeavor.

Second, our research finds that a second process-oriented factor—exposure to radical networks—is a statistically significant predictor of religious radicalization. In particular, we found that Muslim subjects who reported that one of their peers had traveled to Somalia were more likely to exhibit higher radicalization. Drawing on the observation that Kenyan young adults who leave Eastleigh to go to Somalia are likely to participate in terrorism, we interpret our result as systematic evidence that links to a radical social network increase radicalization. Our evidence offers new quantitative evidence from a random sample that supports a literature largely based
on detailed case studies (Dahl and Zalk 2014; Munson 2008). At the same time, we find that Christian subjects who knew a Somalia-bound migrant were not more likely to exhibit higher radicalization. This may be due to the fact that connection to Somalia-bound migrants is less meaningful for Kenyan Christians than for Kenyan Muslims. We believe that future studies can expand on our measure by inquiring more precisely about the means by which networks radicalize bystanders. Other studies might also examine the factors that explain variation in social network composition among marginalized young adults who were all raised in the same micro-political environment of a particular district, such as Eastleigh.

Third, our analysis highlights the importance of psychological factors, most notably, troubled social relations, in predicting radicalization among young adults. We believe that the study of psychological underpinnings is particularly promising as it can help scholars, community organizations, and practitioners better understand and target efforts aimed at preventing radicalization. While our evidence is predictive in nature, we believe it merits greater attention from scholars focusing on how trauma affects radicalization. Here, we note that many of the psychological variables we put under scrutiny yielded large effect sizes—though many were insignificant due to the relatively small sample size and limited variation in the measures. As such, these variables (e.g., losing one’s job and/or having lost a relative) can guide future research to more fully understand which psychological determinants are most salient in fostering religious radicalization.

Fourth, our “null-finding” regarding macro-level grievances and other salient individual-level correlates—that is, religion, gender, age, and marital status—are arguably as important to the literature. In particular, we find no evidence that political and economic marginalization at the individual level explain the variation in radicalization among either our full sample and our separate Christian and Muslim subsamples. This finding represents a significant challenge to conventional explanations of support for violence (e.g., Esposito and Voll 1996; Abadie and Gardeazabal 2008; Shafiq and Sinno 2010; Chiozza 2010). Simultaneously, we wish to emphasize that our findings do not contest the causal effect that poor governance at the city or country level may exert on variation in radicalization. We highlight this point in order to prevent analysts and other entities (discussed in Kundnani 2012) from misrepresenting our findings to exonerate governments with poor governance records from their potential role in causing radicalization within whole countries or cities. Future research can investigate whether city-level or country-level measures of marginalization exert effects on radicalization at those levels of analysis.

We conclude with two final comments. First, we reflect on the “false positives” problem in radicalization studies as well as the broader concern of external validity. Scholars of radicalization and terrorism studies describe this problem as the fact that many individuals who possess some or all of the characteristics found to predict radicalization in various studies are not in fact radicalized. We have two reflections here. First, we emphasize that studies like ours reveal the average effect of each independent variable on radicalization. Furthermore, as with any regression analysis,
the variables we find to be statistically significant predictors of radicalization are interpreted as evidence of systematic patterns rather than rules. In this study, these variables are sufficiently strong such that they have less than a 5 percent chance of being generated by random chance. As such, these patterns bear important insights for policy makers seeking to design counter-radicalization programs.

Our second comment relates to external validity. We found a set of factors to be significantly correlated with radicalization among Christian and Muslim young adults in Nairobi, yet do not know if our results hold in other settings. Even still, our findings match several results in other quantitative and qualitative studies. First, our finding that meso-level process-oriented factors predict radicalization matches findings from several other contexts. Notably, our finding that religious identification predicts higher radicalization is similar to the findings of a study of British Muslims, which found that stronger Muslim (rather than British) identification predicted greater support for martyrdom and that stronger British (rather than Muslim) identification reduced support for violence toward non-Muslims (Cinnirella et al. 2010). Our recovery of a significant effect of peer networks on radicalization matches qualitative and empirical results from the studies of extremist movements in Italy and France (della Porta 2006), Israel (Munson 2008), and the Al-Muhajiroun movement in the United Kingdom (Wiktorowicz 2005). Second, our finding that macro-level grievances do not predict radicalization fits with studies from Pakistan (Blair et al. 2013, 46) and Indonesia (Jo 2012), which find that economic marginalization does not explain support for terrorism.

Future research can play an important role in building on the limited nature of existing micro-empirical work on the causes of radicalization. To advance the understanding of the generalizability of results from any particular study, future researchers should consider empirically testing leading hypotheses on radicalization in multiple conflict settings. Other scholars might consider research designs that attempt to examine the correlates of extremist behavior in different contexts. With a greater number of such studies, researchers and policy makers alike will be able to better understand the external validity of particular causes of radicalization.

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Supplemental Material

Supplementary material is available for this article online.

Notes

1. For micro-level psychological determinants see, for example, Borum (2004) and Silke (2008), while Ginges, Hansen, and Norenzayan (2009) and Brubaker (2015) highlight meso-level explanations. Finally, Sageman (2004) and Mousseau (2011) focus on macro-level variables of radicalization.

2. Influential accounts of this reasoning are provided by scholars of religious studies (e.g., Esposito and Voll 1996), economists (e.g., Abadie and Gardeazabal 2008), and political scientists (e.g., Shafiq and Sinno 2010) alike.

3. Indeed, Neumann (2013, 891-92) explains that the importance of beliefs to the justifications, organization, and actions of religious militant groups stands against a sharp divorce between cognitive radicalization and behavioral radicalization.

4. We believe this approach overcomes limitations in other approaches to measure religious identification, including potentially leading questions that may unintentionally prime subjects on their religious identity. See Sidanius et al. (2004, 406) for an example.

5. Interviews conducted by the coauthors in Mombasa, July 2014 and Nairobi, November 2014. Subjects’ names are kept confidential as part of the terms of our research discussions.

6. During the survey, the Islamic State was an intensely debated topic among Muslims in Eastleigh, which made support for the group a credible measure of radicalization. Indeed, in October 2015 parts of Al-Shabaab switched allegiance from Al-Qaeda toward the Islamic State (Sheikh 2015).

7. For instance, we deliberately chose not to use terms like “willing to arm to defend against Islamic fundamentalists” so as to avoid that the Christian measure gauges support for defensive violence.

8. Scholars of the Islamic State have found that many supporters of the group perceive its use of violence as an act of defense against external aggression, chiefly Western and allied military operations in the Islamic world (Wood 2015; McCants 2015; Weiss and Hassan 2016).

9. Nonetheless, some subjects may have interpreted the act of pledging loyalty to ISIS (Islamic State in Iraq and Syria) as indicating support for Islamic law or Muslim unity. We acknowledge this as a limitation of our outcome measure.
10. Our empirical strategy relies on indexes wherever possible in order to ameliorate measurement error. To highlight that our indexes indeed measure distinct latent phenomena, in Online Appendix Figure 1, we plot a correlation matrix of the six indexes we use.

11. Note that the relatively low frequency of putting religion as the number one identity category decreased the correlation between the two measures considerably.

12. Given that 31 percent of the Muslim sample is Somalis, we should point out that exposure to Somali migrants is only weakly correlated with being of Somali origin (Pearson’s $R$ of .08).

13. This index, again, has a low $x$—partly owed to the low frequency of some items. Online Appendix Table 2 estimates regressions with the subitems.

14. We note that this variable exhibits a missingness rate of 20 percent stemming from underreporting on the paternal relationship variable. Enumerators conveyed that the reason for the drop is most likely due to the cultural inappropriateness of stating that one is on bad terms with one’s father or that the respondent may not have been raised by their father, a common characteristic in Eastleigh.

15. Note that the variable State-Muslim violence likely exhibits stronger predictive power for the Muslim subsample. Yet, the theoretical literature argues that exposure to violence per se is a driver of radicalization. For this reason, the variable should also matter in the Christian subsample. As such, it is important to point out that the State-Muslim violence variable is only weakly correlated with being Muslim (Pearson’s $R$ of .07).

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