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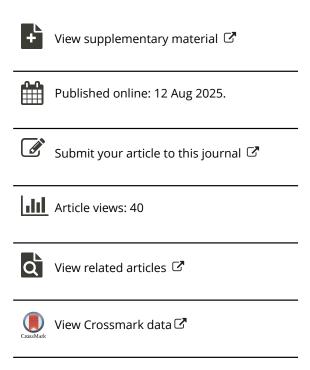
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Magical Practices and Indiscriminate Violence in Armed Conflicts

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ABSTRACT

How do magical practices affect the violent behavior of rebel groups? Using existing data, we examine the impact of magical practices on rebels' use of indiscriminate violence in armed conflicts. We argue that magical beliefs and practices increase the expected utility of using indiscriminate violence as a tool of intimidation; facilitate the vilification of civilians, legitimating their status as targets; and socialize recruits in a way that motivates their use of indiscriminate violence. We expand on existing research about religion and political violence by showing how non-traditional spiritual beliefs and practices shape group tactics and amplify violence against civilians.

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Magical practices and beliefs routinely shape patterns of violence against civilians across a diversity of armed conflicts. Such practices and beliefs include wearing amulets and engaging in rituals believed to protect and/or enhance the fighting abilities practitioners on the battlefield, as well as the use of magical practices to initiate and indoctrinate recruits. Scholars have examined how magical practices affected the violent targeting of civilians by militant groups including the Lord's Resistance Army in Uganda, RENAMO in Mozambique; UNITA in Angola; and the Kamajors in Sierra Leone, among others.

While scholars have investigated how magical practices affect violence against civilians in a variety of individual cases, there has been little systematic, cross-rebel group quantitative analysis of how magical practices and beliefs affect patterns of civilian victimization. Many quantitative studies have examined how the religious ideologies of rebel organizations shape their killing and maiming of civilians.³ However, the majority of rebel groups that engage in magical practices are *not* coded as having a religious ideology in the datasets employed in these studies.⁴ Thus, there is a dearth of quantitative analysis examining the relationship between rebels' use of magical practices and indiscriminate violence against civilians.

To remedy this, we use novel data on rebels' magical practices to investigate how these dynamics affect patterns of civilian victimization in armed conflicts. We argue that rebel groups that employ magical practices perpetrate more indiscriminate killings of civilians, on average, than groups that do not. This is because magical practices increase the expected utility of indiscriminate violence by raising the benefits and lowering the costs of perpetrating such abuses. We expect that this is the case for at least three reasons.

First, rebel groups that are believed to have magical powers will be particularly effective at using violence to intimidate civilian populations because perceptions of these powers are more likely to intimidate both civilian populations and government security forces, increasing the benefits and reducing the costs of indiscriminate violence. Second, magical practices legitimize violence, through ideological assertions that cast those who oppose the rebels' cause as the enemy, and thus legitimate targets, because these enemies oppose a spiritually preordained outcome and are spiritually corrupt. Third, magical practices facilitate violent socialization, often promoting the indiscriminate killing of civilians because such violence is believed to enhance the magical powers of the perpetrators, which helps motivate rebel soldiers and decreases their inhibitions.

To test this argument, we combine data on the indiscriminate terrorist violence of rebel groups in armed conflicts with data on their use of magical practices.⁵ A time-series cross-section analysis reveals that militant organizations, on average, indiscriminately kill a larger number of civilians when they employ magical practices. This finding is fairly robust to a battery of alternative statistical assessments.

This paper makes at least two contributions. First, this paper helps fill a gap in the quantitative study of terrorism in the context of civil conflicts. Scholars have examined how a variety of factors, including rebel group capacity, external support, natural resource wealth, and regime type, affect rebel groups' use of terrorism in civil conflicts.⁶ Researchers have also explored how rebel ideology, particularly religious ideologies, affect the prevalence and patterns of terrorism in armed conflicts.⁷ However, despite the focus on (religious) ideology, to the best of our knowledge, there is no quantitative study of the effects of magical practices on terrorism in armed conflicts. This is a serious omission given theories that magical beliefs exert a large influence on patterns of violence against civilians during armed conflicts.⁸

Second and relatedly, our findings highlight the fact that magical practices really do have a significant effect on the conduct of armed conflicts. However, despite their relevance, there exists, to our knowledge, only one other quantitative study of the magical practices of rebel groups. This study examines only the effects of magical practices on the recruitment of child soldiers. Thus, we show that magical practices affect conflict dynamics in other ways, reinforcing the idea that scholars should take magical practices seriously in the study of armed conflict.

The rest of the paper is structured as follows: first, we begin by defining key terms. Second, we develop a theory explaining the association between rebels' use of magical practices and their engagement in indiscriminate violence against civilians. Specifically, magical practices increase the utility of employing indiscriminate violence against civilians. This is because magical practices help intimidate civilians and government forces, reinforcing the benefits of indiscriminate violence. Additionally, magical practices are associated with beliefs that help create permissive conditions for the use of indiscriminate violence against civilians. Furthermore, magical practices can facilitate violent socialization, as they are sometimes believed to be enhanced



through ritualistic violence, motivating soldiers to engage in further indiscriminate violence. Next, we describe the research design and present the results. We also describe a battery of robustness checks. We conclude by discussing the implications of our findings.

Key terms

Before delving into the theory, it is important to define key terms. Nathalie Wlodarczyk, writing in the context of armed conflicts, describes key characteristics of what magical practices and beliefs, typically derived from traditional African religions, are. She notes that magical practices involve manipulating objects, through rituals and the manipulation of everyday objects (e.g., wearing amulets), to access the power and wisdom of the spiritual world to solve problems in the physical realm. Compared to other religions, which tend to view their interactions as bounded or shaped by a god or gods, practitioners of traditional African religions tend to emphasize "their own ability and skill to manipulate spirit power to the ends they choose."11 As such, they tend to have greater agency in interpreting what morally acceptable behaviors are than members of many other religions. Practitioners of magic believe they can harness unique powers, by fusing together the physical and spiritual worlds, to influence events, including warfare.12

For instance, it is common for practitioners of magic, including rebels, to wear protective amulets to keep them safe from harm.¹³ Rebel soldiers in many countries believe that wearing protective amulets will make them immune to bullets. 14 Other examples of magical practices are rituals that groups conduct to initiate new recruits, totems and prayers that are believed to enhance soldiers' fighting capabilities, and beliefs that the group leader holds magical powers beyond that of the average member.¹⁵

Drawing on Wlodarczyk, our focus is thus on magical rituals within the confines of underlying spiritualist ideologies, as non-secular belief systems that reference the supernatural. We should also stress that our focus on African conflicts is not intended to draw a false dichotomy between Western rationalism and non-Western "magical thinking." Indeed, secular ideologies—even rationalism—may be prone to magical beliefs when unquestioning faith in these ideologies' capabilities justifies, legitimizes, and guides human behavior.¹⁶ That said, our goal is to examine how non-secular belief systems outside of the monotheistic (traditional) religious ideologies—such as Islam, which has captured significant attention—guide rebel behavior.

Magical practices influence rebel behavior by facilitating mobilization and indoctrination of members, female recruitment, and boosting organizational survival. Practices have been linked to atrocities, such as the perpetration of sexual violence and violence against civilians.¹⁷ In sum, magical practices parallel religious ideology in shaping group behavior, including violent tactics.

Our main outcome of interest is deliberately indiscriminate terrorist violence against civilians. We borrow Page Fortna and coauthors' definition of such violence. Deliberately indiscriminate terrorist violence is distinct from other forms of violence commonly employed by rebel groups during armed conflicts.¹⁸ This form of violence does not include attacks against military targets. Rather, it is intentional, purposefully aimed at civilian targets through attack modality, weapon choice, and venue choice. It also does *not* include selective or discriminate violence targeting civilians believed to be collaborating with government forces.¹⁹

Fortna and coauthors argue the arbitrary nature of violence is why this form of terrorism particularly "terrifying." As detailed below, we expect that magical practices will particularly facilitate this type of violence by reinforcing its ability to intimidate civilians, which benefits rebel organizations in multiple ways. Additionally, we also argue that beliefs associated with magical practices help create permissive conditions for deliberately indiscriminate violence.

Finally, it is also important to consider the types of conflicts we are examining. As will be detailed later, the sample of rebel groups used in our quantitative analysis is derived from the Non-State Actor (NSA) dataset.²¹ We use the same definition of armed conflicts this dataset does. The NSA dataset builds off the UCDP/PRIO Armed Conflict Dataset, which covers all civil wars and civil conflicts across the world. For fighting to be classified as an armed conflict that enters this dataset, it must involve at least one organized, non-state force fighting the government, primarily within the territory of the state. The fighting must be about either territorial or government control and must result in at least 25 battle-related deaths in a calendar year.²²

Theoretically, we examine this type of fighting because the literature we build off largely focuses on these types of conflicts.²³ Empirically, the only existing cross-group data on this phenomenon also focuses on this type of conflict.²⁴ Future quantitative research should consider the role of magical practices in other conflict settings, such as low-intensity terrorist campaigns.

The geographical context

Our theory and quantitative analysis focus specifically on African rebel groups. From a theoretical standpoint, we do this because the literature we build off focuses on African militant organizations and traditional African religions²⁵ from which their magical practices are derived.²⁶ From an empirical standpoint, we focus on African rebel organizations because existing cross-group data cover only groups on this continent.²⁷ It is possible that these results are not fully generalizable outside of Africa. However, even this is the case, it is still valuable to understand African-specific conflict dynamics, both because they have policy and academic relevance, and because they highlight potential sources of heterogeneity in cross-national studies on patterns of rebel group violence.²⁸

While the nature of the data does not allow us to fully assess the generalizability of our findings, there is anecdotal evidence of rebel groups engaging in magical practices across the world. Indeed, militant organizations in Colombia, El Salvador, Laos, Mexico, and Myanmar also engage in magical practices, often with similar functions to African rebel groups, such as trying to bring protection to soldiers or facilitating the authority of rebel leaders.²⁹ Thus, a parallel theoretical logic could plausibly exist in which the types of magical practices featured in other parts of the world enhance the utility of rebel groups using indiscriminate violence and help create the permissive conditions for them to do so. Future quantitative research should examine the similarities and differences in the consequences of rebel groups employing magical practices across different parts of the world.



Magical practices and indiscriminate violence

There are three mechanisms by which we expect that the use of magical practices will increase the amount of indiscriminate violence perpetrated by rebels: (1) raising the expected utility of intimidating and controlling civilian populations; (2) ideological justifications; and (3) the facilitation of violent socialization tactics.

Civilian control and intimidation

First, violence is often used by rebels to help control civilian populations. When armed movements have difficulty controlling civilians, they are more likely to turn to indiscriminate violence against these populations, including punishing civilian collaborators.³⁰ Militant groups also engage in violence to intimidate civilian supporters of the opposition and to pressure governments into making concessions.³¹ Indiscriminate violence is particularly terrifying as it can strike anyone, not just individuals directly involved or participating in conflicts.³² Thus, rebel groups use violence against civilians to intimidate them, which then helps such organizations achieve various goals.³³

However, indiscriminate violence can backfire against militant organizations. Crucially, the fallout from indiscriminate targeting is more acute owing to the moral repugnance deliberate targeting of civilians evokes.³⁴ Instead of driving civilians to be more submissive to abusive rebels, such violence could lead to populations turning against rebel groups and might even push them to support the government instead.³⁵ Relatedly, governments can also employ harsh counterterrorism or counterinsurgency measures that could result in the defeat of rebel groups that use extensive indiscriminate violence.³⁶ Thus, employing indiscriminate violence to intimidate civilian populations is a risky strategy. The gap between these benefits and costs determines the expected utility of engaging in indiscriminate violence against civilians.

We expect that militant movements that employ magical practices will be better able to incur these costs, making indiscriminate violence a more attractive option for them. First, we expect that civilians will be more hesitant to actively work against militants that wield magical powers. Rebels that use magical practices are expected to be particularly effective at using violence to intimidate civilians. Indeed, rebel groups have leveraged ritualistic violence in multiple conflicts, including in Liberia and the Democratic Republic of the Congo, to intimidate civilians and enemy forces into submission.³⁷

Crucially, rebel groups that conduct magical practices are advantaged because beliefs in power of magic are commonly held by civilians and enemy combatants. Consequently, magical rituals inspire genuine fear among enemy combatants and civilians insofar as "the shared belief in the power residing in the spiritual world means all action gets interpreted within a similar conceptual framework."38 Insofar as these shared beliefs are prevalent, the civilian population will hold strong beliefs that render it sensitive to spiritual propaganda, making it easier for groups that utilize these practices to cow it into submission.³⁹ Thus, spiritual beliefs will be particularly important in the case of indiscriminate violence which elicits moral horror owing to its wanton nature.

Second, given a common cosmology and lexicon surrounding spiritual beliefs, government forces will also hold strong beliefs that sometimes render them hesitant to confront rebel groups believed to be magically powerful. Rebel soldiers in these groups are believed to be immune from harm (e.g., invincible to bullets) and/or to have augmented fighting abilities (e.g., their guns are more effective because of charms).⁴⁰ In one example, in early stages of the conflict in Uganda, government troops would retreat when they heard the Holy Spirit Mobile Force approaching because they were intimidated by the rebels' perceived powers. As a second example, the government forces in Mozambique were also reportedly demoralized because they believed that RENAMO could not be defeated by virtue of the militants' battlefield protections and ability to resurrect the dead to take revenge of their killers. As a third example, the Civil Defence Forces in Sierra Leone also intimidated enemy combatants using magical practices.⁴¹

In sum, we expect that rebel groups that employ magical practices are better positioned to commit indiscriminate violence than those that do not because they confront a lower probability of government reprisals. This is *not* to say that magical groups never face government reprisals or that dependence of magic to intimidate government forces is a sustainable strategy but that by intimidating government forces, on average, they can ward off harsh counterterrorism responses compared to groups that do not proclaim magical practices. Additionally, these groups have a lower probability of public backlash, given the heightened power to intimidate through the invocation of beliefs resonant with the public's spiritual beliefs. Given that the costs are less burdensome for such groups, magical rebel groups will be more likely to try to derive the benefits associated with indiscriminate violence, such as controlling civilian populations and weakening civilian support for governments.

A potential counterargument is that if civilians and government forces are intimidated by the perceived magical powers of rebel organizations, then rebels do not need to take the risks associated with indiscriminate violence to intimidate these targets. However, for the threat of magical powers to be credible, we expect that rebel groups must often use violence to signal that they are powerful and can impose costs on civilians and government forces. Said differently, magical practices will be viewed as more intimidating when they are paired with violence.

Ideological justifications

Second, religious and spiritual ideologies are often tied to violence against civilians. Broadly speaking, ideology affects militant groups' patterns of violence by discerning which segments of the population are, and are not, acceptable targets. Ideologies that promote a strong sense of "othering" by clearly defining in-groups and out-groups more clearly identify who is an acceptable target for violence. Ethnonationalist and religious ideologies, for instance, are expected to be strongly associated with violence against civilians because of their emphasis on othering.

Indeed, individuals in out-groups are *not* viewed as potential recruits and supporters, and thus, less restraint will be shown towards them. Relatedly, certain ideologies can clearly define who the enemies are, such as members of other religions, ethnicities, socioeconomic classes, or political affiliations.⁴⁴ Thus, ideology can also be used to frame the moral justifiability of violence against these out-groups.⁴⁵ To this end,



religious militant groups are particularly lethal because their ideologies promote strong othering and frame violence as morally justifiable.⁴⁶

However, a large proportion of rebel and terrorist groups coded in existing datasets are just radical Islamist groups.⁴⁷ This overlooks important ways in which other manifestations of religious and spiritual practices affect rebel groups' behaviors. 48 Similarly, we expect that, even when holding broader ideology constant, magical practices will have similar effects in promoting indiscriminate violence against civilians in ways that other religious ideologies do.

Working with spiritual mediums, including receiving their blessing and facilitate recruitment, as well as more generally framing their struggle in spiritual terms, has proven useful for many rebel groups.⁴⁹ Groups such as the Zimbabwe African National Liberation Army (ZANLA), worked closely with spiritual mediums to receive their blessing to help mobilize recruits. 50 In Senegal, priestesses played an important role in mobilizing recruits for the Mouvement des Forces Démocratiques la Casamance.⁵¹ RENAMO is Mozambique also relied on spiritual mediums as part of their operations.⁵² Magical practices also played an important role in mobilizing militants in the civil war in Liberia.⁵³ Thus, magical practices have an important ideological element that helps, in part, shape rebel group behavior.

These belief systems may afford wider-ranging latitude to rebels in designating legitimate targets. Whereas for example radical Islam demarcates between the infidel and the true believer, spiritual belief systems lend greater leeway to groups, and agency to their leaders, to cast anyone who opposes the goals of the group as spiritually corrupt, and thus, a legitimate target.⁵⁴ Groups frame their struggle and grievances in spiritual terms by seeking the blessing of spiritual mediums or leaders in their communities. This framing allows rebels to legitimate their behavior to potential recruits and civilian supporters.

Indeed, the enemy's activities are often associated with the "evil" use of power whereas the rebel's invocation of the same deities or spiritual resources are assumed to be good.⁵⁵ Accordingly, the expansive latitude spiritualist groups possess in designating 'others' is expected to facilitate arbitrary violence, for the express purpose of terrorizing and subduing those deemed spiritually fair game. Relatedly, groups that deploy magical practices may have freer rein to wage indiscriminate violence because while religious ideology may constrain groups by "a moral code and the inclination of God (as interpreted through defined doctrine)", thus potentially restraining the use of violence, magical beliefs do not impose doctrinal limitations.⁵⁶

Scholars hold that indiscriminate violence is a subclass of civilian targeting, that through its arbitrary targeting of innocents, is taboo, and morally repugnant.⁵⁷ This moral aversion should render individuals in the organization hesitant, to some extent, to carry out such violence. However, by defining the rebels' cause as spiritually ordained, magical practices can lower militants' reservations to carrying out indiscriminate attacks.

Thus, we expect that such groups will be more violent because they can more easily justify their violence to their members and supporters, and their enemies can be painted as legitimate targets because they oppose struggles that are deemed spiritually justified. Said differently, building on the above discussion, magical practices and beliefs promote strong othering and can be used to morally justify violence. As with other militant ideologies, both dynamics contribute to increased levels of violence against civilians.⁵⁸ In the context of magical practices, othering occurs through relegating anyone who opposes the rebel's cause as spiritually corrupt or evil, or as undermining a divinely preordained cause, and therefore, a fair and legitimate target.

Arguably, magical practices, by promoting and legitimating violence against civilians can shoot a rebel group in the proverbial foot by undermining its perceived legitimacy.⁵⁹ At the same time, however, ideology can augment the legitimacy of violence by casting its use as a necessary tool to achieve group goals and dehumanizing the enemy, and thereby designating it as a legitimate target.⁶⁰ Thus, while violence against civilians can harm the perceived legitimacy of rebel perpetrators, ideological framings, including the use of magical beliefs, can help offset some of these legitimacy costs and be used to justify the use of violence.

As a second potential caveat, if rebels can use magical practices to secure or coerce civilian support, it is unclear why they may need to use violence. However, rebel groups often use coercion and persuasion together.⁶¹ Indeed, militant groups might need to use violence to control and/or coerce certain segments of the population but then use ideology to justify this violence. Rebels with clear ideological foundations, such as the GIA in Algeria and the Taliban in Afghanistan, still used violence to intimidate civilians for a variety of purposes.⁶² Thus, we expect that the ideological foundations of these magical practices help rebels justify these abuses.

Violent socialization

Third, we expect that magical practices promote the use of violence as a form of socialization for combatants. Violence against civilians can serve as a tool of socialization. Brutal acts of performative group violence, especially gang rape, can forge bonds among combatants who previously lacked strong ties to each other, as these acts foster feelings of prestige and belonging among participants.⁶³ This argument has been extended to the killing and maiming of civilians as well.⁶⁴

Relatedly, rebel groups that employ magical practices often do so, in part, to socialize combatants. Specifically, ritualistic violence plays an important role in the magical beliefs and practices of some militant groups.⁶⁵ Indeed, ritualistic violence, which even included reports of cannibalism in some instances, was practiced in a variety of conflicts, including in Liberia and the Democratic Republic of the Congo, specifically because the violence was expected to strengthen the magical abilities of the perpetrators.⁶⁶ Ritualistic violence that is believed to provide magical powers to perpetrators helps rebel groups motivate their recruits to fight by promoting the idea that they are magically powerful, and thus, will be safe and successful on the battlefield.⁶⁷

This is somewhat different from the mechanism, detailed in prior literature, whereby violence serves to foster bonds among cadres.⁶⁸ Instead, the focus of our argument is on the use of ritualistic violence to motivate recruits to fight. However, both explanations are related in that they involve the use of violence against civilians to socialize and motivate rebel soldiers. Additionally, spiritual beliefs affect the militants' psyches by convincing them of their own invincibility, thereby animating them to behave in a more brazen manner on the battlefield. Thus, we expect that groups that employ magical practices will be particularly violent towards civilians because it is an important part of their socialization processes.⁶⁹

While violent socialization motivates the aggravation of civilian targeting in general, we expect it to animate indiscriminate violence specifically by lowering inhibitions among recruits. Ritualistic violence desensitizes recruits to the use of violence in general, but the spiritual ideology underpinning ritualistic violence helps surmount the mental barriers new recruits may have against hurting innocent individuals.

A potential counterargument is that magical practices reduce indiscriminate violence by increasing cohesion and compliance within the rebel ranks. Indeed, magical practices can serve as an important tool for socializing combatants as well as promoting obedience among the rank-and-file.⁷⁰ On the latter point, rebel leaders can also wield the threat of magical or spiritual punishment to coerce compliance from the rank-andfile.⁷¹ This is relevant because rebel groups that have high levels of social cohesion, and who are more effective and training and indoctrinating recruits, are typically more restrained in their treatment of civilians, as cadres are less likely to commit violence that is not sanctioned by the rebel leadership.⁷² Given the aforementioned costs associated with indiscriminate terrorist attacks, militant leaders often have the incentive to restrain such behavior.⁷³

However, rebel leadership still sometimes deliberately orders the use of indiscriminate violence because of the associated benefits, such as the coercion and intimidation of civilian populations.⁷⁴ Again, we expect that groups that employ magical practices have an advantage over other groups in using indiscriminate violence, as civilians are more likely to be intimidated by these groups.⁷⁵ Furthermore, well-disciplined and obedient rebels are also more likely to commit violence when it is sanctioned by rebel leaders.⁷⁶ Thus, given that groups that engage in magical practices are more effective at using indiscriminate violence, we expect that rebel leaders of these groups will be less likely to restrain, and more likely to promote, the use of indiscriminate violence.

Testable implication

Tying these three mechanisms together, we expect magical practices to increase the expected utility of indiscriminate violence through raising the benefits and lowering the costs of the use of such violence. As noted above, magical practices make indiscriminate violence a more effective tool of intimidation through increasing the terror felt by the targets as well as decreasing the probability of a severe government counterterrorist response. This means that a strategy of intimidation is less costly, and is more effective, for rebel groups to pursue when they are perceived to have magical abilities.

Furthermore, ideological principles associated with magical practices can help reduce the legitimacy costs associated with violence by framing the violence as necessary and the opposition as legitimate targets. This is another way in which magical practices lower the costs of indiscriminate violence. Finally, magical beliefs and practices increase the utility of indiscriminate violence as a socialization tool because such violence is believed to enhance the magical powers of perpetrators, which serves as another motivator for rebel soldiers.77

In particular, we expect that magical practices will be associated with an increase in the number of fatalities inflicted by rebel groups in indiscriminate terrorist attacks. This is relevant because there are many terrorist attacks in which no one is killed.⁷⁸ However, the infliction of fatalities, not just the total amount of attacks, is especially relevant for the degree to which civilian populations are intimidated, governments respond, and rebels have their legitimacy eroded.⁷⁹ Thus, given the centrality of these mechanisms for our theoretical arguments, we focus on the effects that magical practices have on the total number of fatalities rebels indiscriminately inflict. This leads to our central hypothesis that:

H1: Rebel groups that employ magical practices will inflict a higher number of indiscriminate fatalities than rebel groups that do not use such practices.

Research design

Sample

Our measure of indiscriminate killings comes from the Terrorism in Armed Conflict (TAC) dataset.⁸⁰ TAC links all rebel organizations, active between 1970 and 2013, that are present in the Uppsala Conflict Data Program's (UCDP) Dyadic Dataset (version 1-2014) to terrorist attack data in the Global Terrorism Database (GTD).⁸¹

We use a rebel group-year unit of analysis, rather than a dyad-year analysis, because the main independent variable (magical practices) is collected at the group, rather than dyad, level. Thus, the base for our sample is the TAC rebel group-year dataset. Rebel groups enter TAC either one year before the first registered battle-related death they are associated with in the UCDP or the first year a group appears in the GTD, whichever comes first. The last year a group is in TAC is either five years after its last active conflict year or the last year it appears in the GTD, whichever comes last.⁸²

We then merge the aforementioned variables from the MAGICC dataset into this TAC rebel-group year sample. As will be discussed in more depth later, the MAGICC dataset covers 106 African rebel movements that were active at least at some point between 1989 and 2011. However, a group can enter the MAGICC dataset before 1989, and leave after 2011, so long as it was active for at least sometime during this period. As a result of joining the two datasets, the first overlapping group enters the sample in 1973 (the EPLF), while 36 groups are still in the sample in 2013, the final year of the analysis (i.e., when the data in TAC end). Merging the TAC and MAGICC datasets produces a rebel group-year sample with 1,177 observations (before any observations are dropped because of the inclusion of control variables).

Dependent variable

As discussed earlier in the paper, we expect that magical practices will be associated with an increase in the indiscriminate killing of civilians. Directly measuring discriminate and indiscriminate violence is difficult, as it would involve knowing the intent of the perpetrators for most attacks. However, Fortna et al. (2022) use information from the GTD to operationalize measures of indiscriminate terrorist violence. This process involved multiple steps. First, the GTD has three inclusion criteria, two of which must be met for an attack to enter the GTD. These are that (1) the attack must

be at the behest of economic, political, religious, or social goals; (2) evidence of an intent to coerce or send a message to a broader audience beyond the immediate targets of the attacks; and (3) the attack must be "outside the context of legitimate warfare activities."83 To measure indiscriminate violence, Fortna and coauthors include only attacks that meet all three of these criteria.

Next, Fortna et al. attempt to further classify attacks as indiscriminate based on both characteristics of the attack and target type that they expect to be indicative of indiscriminate violence against civilians. They develop both a less restrictive and more restrictive measure of indiscriminate terrorism. For the less restrictive measure, attack types include armed assaults, bombings, hijackings, hostage takings, and incidents in which the attack type is unknown. It also includes the target types of airports, businesses, educational institutions, food and water supplies, religious targets, telecommunications, tourists, transportation, utilities, and incidents in which the target type is unknown. Incidents with other types of attack modes and targets are excluded.

The more restrictive measure includes only attacks that involve either bombings or armed assaults for the attack mode. It also further narrows down the target types included by using information in the target subtype category in the GTD to better capture indiscriminate violence against civilians in public spaces.⁸⁴ For the main analysis, we use only incidents that meet the stricter definition of indiscriminate terrorism; as robustness checks, we also conduct analysis using the less restrictive measure.

Building off this, Fortna and coauthors then construct a more restrictive and less restrictive version of each of the following four variables: (1) total incidents (number of fatal and non-fatal attacks); (2) fatal incidents (number of attacks with at least one fatality); (3) mass violence incidents (attacks in which there are five or more fatalities); and (4) fatalities (the total number of people killed). These four variables are all yearly counts of these incidents for each rebel group.

While correlated, these four different phenomena do not always have the same causes.85 As detailed in our theory, we expect that groups that engage in magical practices are more likely to indiscriminately kill civilians. Thus, for our main analysis, we use the more restrictive measure of the total count of indiscriminate fatalities inflicted by a group in a year. As robustness checks, we also rerun the main analysis, employing the less restrictive measure of the number of fatalities inflicted, as well as the other counts of indiscriminate terrorist incidents.

Given that the dependent variable has a significant right-skew with many observations having no fatalities in a given year, we employ negative binomial regression analysis. The standard errors are clustered on the rebel group in every model. While the UCDP's One-Sided Violence dataset is a valuable resource, we believe that the TAC dataset is more appropriate for our purposes.⁸⁶ Specifically, the One-Sided Violence dataset captures the total amount of civilian fatalities perpetrated by rebel groups, but TAC permits us to directly test indiscriminate violence, which is central to our theoretical argument.

Independent variables

To capture the use of magical practices by rebel groups, we rely on data from the Magical Acts in Civil Conflicts (MAGICC) dataset, which contains data on the use of such practices by 106 African rebel organizations that were active at some point during the period of 1989 to 2011.⁸⁷ As discussed earlier, rebel magical practices take a variety of forms, including the use of rituals, amulets, and other charms believed to enhance personal protection and/or fighting abilities.⁸⁸

Based on existing literature, the MAGICC dataset classifies magical practices into two different categories.⁸⁹ The first captures whether magical practices are used throughout the entire rebel organization, including both rank-and-file and leadership. The second variable is a subset of this variable and captures whether rebel leaders are perceived by at least some of their members to have powers that are even greater than that of the average cadre in the organization. For instance, while many members of RENAMO engaged in rituals believed to stop bullets from hitting them, some officers in RENAMO were believed to have *additional* powers, such as flight and precognition.⁹⁰

Both variables are binary indicators of whether evidence was found for these practices. Additionally, the MAGICC dataset contains two versions of both variables, one with a more inclusive threshold of evidence, and another with a stricter threshold for inclusion. The more inclusive measures classify these groups as engaging in such practices even when the evidence is more anecdotal or indirect. The more exclusive measure codes groups as using magical practices only when the evidence is more direct and when there are *not* conflicting reports about the use of such practices.⁹¹

Due to the limited information available on the internal dynamics of many rebel organizations, the data in the MAGICC dataset are time invariant. While this limits our ability to engage in causal identification, this dataset still provides, to the best of our knowledge, the most extensive information on the use of magic by rebel movements. Additionally, given that these practices tend to draw on more established cultural beliefs and practices, many groups likely use these practices throughout their lifespan.⁹²

For the main analysis, we employ both the inclusive and exclusive measures of whether magical practices are observed throughout the organization. Our reasons for this are theoretical. While the perceived magical powers of rebels play an important role in persuading and compelling cadres to engage in certain behaviors, the magical abilities that the rank-and-file believe themselves to have also affect their behavior. Other high-quality datasets exist that capture the ideologies of rebel organizations, including religious ideologies. However, as Soules and Avdan show, most groups that employ magical practices are *not* classified as having religious ideologies in other datasets. This does not mean that other datasets suffer from measurement error. Indeed, these datasets simply capture the broader ideology of rebel groups, not specific types of indoctrination activities they engage in. However, the MAGICC dataset provides the ideal resource for measuring the use of magical practices by rebel groups.

Control variables

We hold constant a variety of potentially confounding factors. First, using a transformed version of the Non-State Actor (NSA) dataset's⁹⁵ measure of a rebel group's strength, relative to the government it is fighting, we include a binary indicator of whether an organization is coded as much weaker than the government.⁹⁶ We control for rebel strength because it is expected to affect rebels' use of violence against civilians and

because magical practices can facilitate mobilization for rebels, which can subsequently affect their strength.97

Next, using data from the Foundations of Rebel Group Emergence (FORGE) dataset, we control for a dichotomous indicator of whether a group adheres to a religious ideology.98 Such ideologies can affect rebels' use of violence against civilians.99 Additionally, we want to ensure that we are capturing effects of magical practices that are distinct from broader religious ideologies. Using data from Roos Haer and coauthors, we include a three-point ordinal indicator measuring the extent to which rebel groups forcibly recruit child soldiers. 100 Groups that recruit children are more likely to kill civilians and groups that employ magical practices are more likely to forcibly recruit children.¹⁰¹ With data from the Rebel Contraband Dataset, we include a binary indicator of whether groups exploited natural resources at any point during their lifespan as natural resource wealth affects the extent to which groups rely on ideology to mobilize recruits and their treatment of civilians. 102,103

Using data from the Varieties of Democracy dataset's measure of Electoral Democracy, we control for regime type. With data from Christopher Fariss and coauthors, we also control for the logged per capita GDP.¹⁰⁴ This is relevant, as regime type and state capacity affect the use of terrorism by rebel groups. 105 Additionally, magical practices can be wielded to convince rebels to engage in dangerous operations, including against strong militaries. 106 Finally, in some models, we include a measure of the lagged dependent variable to account for temporal dependence. However, given the potential for such a strategy to bias our estimations, we also include models without this control variable.107

Results

The results for the tests of the central hypothesis are presented in Table 1. The standard errors are clustered on the rebel group in every model.

As the results in Table 1 highlight, both the inclusive (Models 1 and 2) and exclusive (Models 3 and 4) measures of magical practices have a positive and statistically significant association with the number of indiscriminate terrorist killings that rebel groups perpetrate in a given year. Thus, we find strong support for the central hypotheses. Turning to the substantive effects, the more inclusive (Model 2) and exclusive measures (Model 4) of magical practices are associated with approximately 3 more killings a year. While such substantive effects might seem somewhat modest, rebel groups commit no indiscriminate killings in approximately 85% of the observations. Thus, magical practices appear to have a notable effect on rebel groups' use of violence.

The control variables also produce interesting results. Across all models, religious ideology has a strong, positive, and statistically significant association with the indiscriminate killing of civilians. This is consistent with the prior literature discussed above. 108 This is particularly relevant as we are not challenging findings in the existing literature that militant groups that ascribe to religious ideologies engage in more indiscriminate violence. Instead, we posit that magical practices are another related characteristic of rebel organizations that also drive violence against civilians. Thus, scholars of religion and political violence should continue to investigate the similarities

Table 1. Rebel magical practices and indiscriminate killing of civilians.

	(1)	(2)	(3)	(4)
Magical practices (inc.)	1.158**	1.418***		
	(0.491)	(0.507)		
Magical practices (exc.)			1.369**	1.130**
			(0.562)	(0.483)
Much weaker	-0.365	-0.271	-0.328	-0.392
	(0.485)	(0.494)	(0.545)	(0.519)
Religious ideology	3.519***	3.124***	2.967***	2.229***
	(0.974)	(0.908)	(0.794)	(0.623)
Forced recruitment of children	0.937***	0.0923	0.647**	-0.108
	(0.283)	(0.330)	(0.319)	(0.355)
Natural resource wealth	0.863	1.274**	0.836	1.506***
	(0.563)	(0.532)	(0.614)	(0.550)
Per capita GDP	-0.706	-1.059**	-0.487	-0.725*
	(0.447)	(0.427)	(0.394)	(0.372)
Democracy score	-3.354**	-4.117***	-3.599***	-4.404***
	(1.385)	(1.516)	(1.380)	(1.364)
Indiscriminate fatalities _(t-1)		0.0239***		0.0245***
		(0.00544)		(0.00559)
Constant	1.932	3.362***	1.789	2.963**
	(1.369)	(1.304)	(1.274)	(1.231)
Alpha (In)	3.194***	2.980***	3.199***	3.001***
	(0.194)	(0.207)	(0.196)	(0.210)
Observations	1,042	912	1,042	912
Chi ²	78.01***	141.2***	84.28***	177.4***
Log likelihood	-1106	-1009	-1107	-1011
Pseudo R-squared	0.0371	0.0520	0.0362	0.0495

Robust standard errors in parentheses.

and differences in the effects that different religious ideologies have on political violence.

The results are also somewhat consistent with the finding that groups that recruit child soldiers are more likely to kill civilians, though the results are somewhat dependent on model specification. 109 Consistent with work by Page Fortna, we do not find evidence for the "weapon of the weak" argument that weaker militant groups are more likely to use terrorism. 110 Interestingly, contrary to prior work we find that rebel groups use more terrorist violence in less democratic countries.¹¹¹ This might be driven by the fact that regime type affects political violence differently in Africa than other parts of the world.112

It is also important to consider the limitations of our analysis, first, that despite showing a significant association between magical practices and indiscriminate violence, we cannot claim causality. Our theory is causal, as we expect that magical practices directly increase the benefits, and lower the costs, for rebel groups to employ indiscriminate violence, which drives them to do so. However, due to the availability of information, the measures of magical practices are time invariant within groups.¹¹³ Thus, we are unable to capture the impact of the possibility that some rebel groups adopt magical practices later in their lifespans than others, which could be associated with their broader patterns of violence. The findings should therefore be viewed as evidence of correlation, rather than causation. Despite this, our analysis represents a first cut at using quantitative analysis to gain insight into the association between rebel groups' use of magical practices and their treatment of civilians.

^{***} p < 0.01, ** p < 0.05, * p < 0.1.

A second potential issue is that there is substantial variation within the types of magical practices and beliefs groups employ. Some types of magical practices and beliefs might have a stronger association with indiscriminate violence than others. However, we still expect there to be meaningful variation between groups that do, and do not, employ magical practices. Overall, our findings provide suggestive evidence that scholars of civilian victimization during armed conflicts should take the role of magical practices seriously.

In the next section, we conduct a battery of robustness checks to assess the strength of the association between magical practices and the use of deliberately indiscriminate terrorist violence against civilians. As a preview, across a variety of alternative tests, we continue to find strong support for the central hypothesis that there is a positive association between the use of magical practices and indiscriminate violence against civilians. While we are still only able to establish a general association, our findings highlight the importance of magical practices in understanding the behavior of militant organizations.

Robustness checks

We also conduct a variety of robustness checks to ensure the strength of the findings. This includes tests with alternative independent variables, alternative dependent variables, and a series of cross-sectional analyses. These tests are detailed below.

Alternative independent variables

We begin by rerunning the main analysis, using the aforementioned measure of magical practices that capture groups whose leaders are perceived to have powers beyond that of the average rank-and-file member. Across all models, we find statistically significant evidence that such groups also kill a larger number of civilians (Table A3). Thus, magical practices at various levels of rebel organizations still affect their patterns of violence.

Alternative dependent variables

We also consider a variety of potential measures of the dependent variable based on the measures of indiscriminate terrorism from the TAC dataset that were discussed earlier.¹¹⁴ Specifically, we use the more inclusive measure of the number of indiscriminate terrorist killings perpetrated a rebel group in a given year (the more exclusive measure is the one used in the main analysis). Additionally, we use both the inclusive and exclusive versions of three other aforementioned measures of indiscriminate terrorism developed by Fortna and coauthors: the total number of indiscriminate attacks (both fatal and non-fatal); total number of fatal attacks (incidents with at least one fatality); and mass violence attacks, which involve five or more fatalities. 115

Magical practices have a positive and statistically significant association with the inclusive count of fatalities in three of four models (Table A4); all models for the stricter measure of mass fatality attacks (Table A5); two of the four models for the more inclusive measure of mass fatality attacks (Table A6); all models for both strict (Table A7) and inclusive (Table A8) measures of any fatal incidents; and all models for the more restrictive (Table A9) and more inclusive (Table A10) measure of total attacks.

Target selection

Another possibility is that results are driven by target choice. Indeed, attacks against "hard" targets, such as the military are police, are often less fatal because they are more difficult to execute.¹¹⁶ Thus, it is possible that groups that employ magical practices avoid attacking hard targets, which makes them more lethal simply because they are attacking targets that are easier to access. To ensure this is not the case, we conduct additional analyses in which the dependent variable is the number of terrorist attacks that rebel groups perpetrated against hard targets in a given year.

To do this, we cannot use the main measures of indiscriminate terrorism developed for the TAC dataset because they all capture violence against civilians only. However, TAC does link all individual attacks in the GTD to actors in the UCDP, which allowed us to build our own measures of terrorist attacks as well. We used a lower threshold of inclusion for attacks than in the main analysis, including incidents that met at least two of the three inclusion criteria in the GTD. We did this so that more attacks against military targets would be included (i.e., attacks that might be considered part of "legitimate warfare").

We used data from James Piazza, who classifies attacks in the GTD as being directed at hard or soft targets. Using the target type (targtype1) variable in the GTD, Piazza classifies attacks as being aimed at hard targets when they are perpetrated against "police and police stations, members of the military or military installments, government figures and buildings, diplomats and embassies, and against other violent non-state actors including rebel movements and terrorist organizations." Using this, we created a group-year count of the number of hard target attacks perpetrated by groups. 118

The model specifications are the same as in the main analysis, except for the dependent variable. Across all models, magical practices have a positive association with the number of hard target attacks perpetrated by a rebel group in a given year, though this relationship is only statistically significant when the more exclusive measure of magical practices is used (Table A11). However, these results suggest that groups that employ magical practices are *not* less likely to attack hard targets, and thus, target choice does not appear to be driving the main results for the test of the central hypothesis.

Cross-sectional analyses

As noted earlier, the measures of magical practices are all time invariant. Thus, to account for the possibility that we have inflated the number of results through time-series, cross-sectional analyses, we conduct additional analyses in which we collapse the dataset down into just a time invariant, cross-section of the 106 groups in the MAGICC dataset. We build two dependent variables for this collapsed dataset: one is the count of the total annual number of indiscriminate fatalities (Table A12) perpetrated by a group and the second is the average number of indiscriminate

fatalities they inflicted across all their years in TAC (Table A13). Across all models, we continue to find support for our central hypothesis. Both measures of magical practices have a positive and statistically significant association with the total count of fatalities, but only the exclusive measure of magical practices has a statistically significant association with the average number of indiscriminate fatalities. Overall, across a diversity of tests, we find evidence for the argument that rebel groups that employ magical practices are more likely to indiscriminately kill civilians.

Conclusion

Scholars expect that rebel groups that engage in magical practices will perpetrate high levels of indiscriminate violence against civilians.¹¹⁹ However, there is a dearth of quantitative literature examining the connection between rebel magical practices and civilian victimization. To remedy this, we use systematically collected, cross-group data on the magical practices of rebel organizations to investigate this relationship.

Specifically, building on prior literature, we expect that rebel groups will engage in more indiscriminate killings of civilians when they employ magical practices because such groups (1) are particularly effective at using violence to intimidate civilians; (2) employ spiritual-based framing to vilify the civilian opposition, painting them as legitimate targets; and (3) view violence as an effective tool for socialization. Using data on the magical practices of rebel organizations, as their use of indiscriminate terrorist violence, we find support for our core hypothesis that rebels will indiscriminately kill a larger number of civilians when they engage in magical practices.

There are potential avenues for future scholarship that could build off this research. First, scholars could quantitatively examine how magical practices affect a variety of other forms of civilian victimization. For instance, the qualitative literature posits a link between militants' use of magical practices and their perpetration of sexual violence. 120 While we investigate the link between magical practices and indiscriminate violence, researchers could also explore the connections between magical practices and more selective or discriminate forms of lethal and non-lethal violence. Second, while our focus is on the association between magical practices and coercive tactics, potentially fruitful research could also examine how these practices affect the non-coercive behavior of militant organizations. For instance, scholars expect that groups employ magical practices, in part, to help gain legitimacy in the eyes of the public.¹²¹ If this is the case, then such rebel groups might engage in other legitimacy-seeking behavior, such as providing social services, like healthcare and education, to civilians.¹²²

Third, scholars should also closely compare and contrast and how different religious and spiritual characteristics of rebel organizations affect their behavior on a variety of dimensions, including their treatment of civilians. Our results provide some evidence that groups that employ magical practices, and those with broader religious ideologies, are more likely to engage in indiscriminate violence against civilians. Again, this suggests that prior work on religion and political violence has overlooked an important subset of militant organizations that are influenced by spiritual factors. Relatedly, it would be fruitful for scholars studying rebel group behavior to examine the ways in which the effects magical practices differ from the effects of broader religious ideologies.

Finally, another possible avenue that follows our paper is to explore how magical thinking—as a form of inference—guides militant behavior. While our focus has been on African spiritualist traditions, from which magical rituals are derived, magical thinking—when defined as doctrinal faith in a belief system—may characterize even secular belief systems, including Western rationalism.¹²³

There are potential policy implications of this paper as well. First, it is vital for policymakers to be cognizant of the contexts in which civilians are most vulnerable to abuse. Our findings call attention to the possibility that more resources are needed to protect civilians in conflicts in which militant organizations practice magic. Second and relatedly, policymakers should also consider the role of magical practices and beliefs in promoting peace. Specifically, rebel groups often work with, or seek the blessing of, civilian spiritual leaders who practice magic, as these individuals often have significant influence in their communities. Thus, to bring the violence to an end, governments could work with these respected spiritual leaders to help promote peace.

This paper highlights the theoretical and empirical importance of investigating the effects of magical practices on rebel group behavior, a factor which is often ignored in the broader quantitative literature on religion and political violence. We find strong evidence of an association between the use of magical practices and the perpetration of lethal, indiscriminate violence against civilians. Magical practices play a central role in many armed conflicts and are essential to our understanding of patterns of violence against civilians.

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