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# The Impact of Public Holidays on Insurgent Attacks: The Case of Thailand

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## ABSTRACT

This paper analyzes Malay-Muslim insurgents' attacks in the three southern provinces of Thailand between the years of 2010–2021 and identifies the role of public holidays on the level of violence. The existing literature suggests terrorists consider holidays during attack planning. However, there is a lack of agreement on the effect direction. Some studies have found that holidays are a force for peace while others have found they can act as trigger for more violence. Applying environmental criminology to the timing of terrorist attacks, we argue that the type of the holiday matters. Therefore, we analyze public (secular), Islamic, and Buddhist holidays separately. We show that Islamic holidays witness increased violence while Buddhist and public holidays see reductions. We discuss that Islamic holidays increase the Malay-Muslim insurgents' motivation to attack by assigning to those dates a higher symbolic value. On the other hand, on Buddhist and public holidays, insurgents may hesitate to attack to avoid the adverse effects of losing public support and triggering a backlash. The results demonstrate the necessity to analyze the temporal dynamics of terrorist attacks.

## KEYWORDS

Terrorism; insurgency;  
Southern Thailand; temporal  
analysis; religion

## Introduction

Between 2004 and 2021, the three southern regions of Thailand (Pattani, Yala, and Narathiwat) witnessed 20,971 insurgent events causing 7,233 deaths and 13,441 injuries.<sup>1</sup> By destabilizing the region, Malay-Muslim insurgents—as they are often referred to—aim to secede from Thailand and create a state for Muslims with a Pattani identity. Some groups have also stated a willingness to accept increased autonomy.<sup>2</sup> Existing research helps us understand the underlying root causes of the conflict such as failed government policies, economic disparities, and the suppression of the Pattani identity.<sup>3</sup> Taking inspiration from environmental criminology, this paper instead is interested in the “near causes” of the patterning and tempo of insurgent attacks.<sup>4</sup>

More specifically, we investigate the impact of public holidays upon violence levels. Religious and public holidays occur cyclically on specific dates with the key purpose of remembering and commemorating key moments of faith or historical importance. This symbolism may affect the likelihood of terrorist attacks by altering the costs and benefits of attacking. This builds upon work conducted in other conflict, albeit predominantly Middle Eastern, settings. For example, Carter found a 34 percent increase in insurgent attacks during the Ramadan in Afghanistan.<sup>5</sup> Similarly, Toft and Zhukov studied Islamic and nationalist militants within the Russia's North Caucasus region.<sup>6</sup> They observe a 20 percent increase in Islamic militant attacks during Islamic holidays, while national Chechen national holidays saw a 9 percent increase in attacks. However, Reese et al., specifically studied the role of the Islamic calendar and holidays in determining levels of violence in Afghanistan, Iraq, and Pakistan. Due to the militants' reliance on societal support, they found that Islamic holidays can act as a “force for peace.”<sup>7</sup>

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Our argument follows Hassner's work identifying four factors that affect the likelihood of conflict occurring on a holiday: the vulnerability and outrage of the target as well as the motivation and constraints of the attacker.<sup>8</sup> We argue that the impact of these factors is not homogenous across different types of holidays which further adds nuance to current investigations which typically only analyze the impact of Ramadan.

Drawing from the daily terrorism data from the Armed Conflict and Location Events Data (ACLED) between the years of 2010–2021, we employ negative binomial regressions to understand whether Thai public holidays, Islamic holidays, and Buddhist holidays affect violence in the three Southern provinces of Thailand.<sup>9</sup> We find support for our argument that emphasizes the heterogeneity of holidays. We find that Islamic holidays witness increased insurgent attacks while Buddhist and public holidays experience the opposite.

The remainder of this paper is organized as follows. The next section presents the background of the conflict in Thailand. The paper then proceeds with a brief review of the relevant literature on the temporal patterning of terrorism our theoretical predictions. The subsequent sections introduce the data and the statistical model and present the results of our analysis. We conclude by discussing the limitations of our study and avenues for further research.

## Background

### *Thailand's deep south conflict*

Thailand's religious composition is nearly homogeneous, with 94 percent of the country identifying as Buddhist. However, the three most southern provinces (Yala, Pattani, and Narathiwat) have a significant Muslim population. Sections within these regions aim to secede from Thailand. The most prominent groups are the Pattani United Liberation Organisation (PULO), Runda Kumpulan Kecil (RKK), Barisan Revolusi Nasional (BRN-C), and Gerakan Mujahidin Islam Pattani (GMIP).<sup>10</sup>

The conflict dates back to 1909, when Pattani was annexed and Malay-Muslims were forcefully absorbed into the Kingdom and into Buddhist culture.<sup>11</sup> In 2004, when former Prime Minister Thaksin Shinawatra launched his version of the "War on Terror" against the insurgents, the conflict escalated.<sup>12</sup> Although the conflict was largely created as a separatist movement, the influence of jihadism and Salafi radicalism increased since the early 2000s and resulted in a noticeable shift in targeting from military and police personnel to civilians.<sup>13</sup> The Malay-Muslim groups recognize that affiliation with global jihadists would be damaging, even self-defeating, and likely cost them popular support at home and legitimacy abroad but they adopted tactics such as targeting civilians.<sup>14</sup>

The most prominent insurgent groups listed above have declared an all-out war on the Thai government and aim to destabilize and attack all those affiliated with the government or those deemed to be an obstacle for the groups to achieve their goal.<sup>15</sup> However, since January 2004, the conflict in southern Thailand has escalated to previously unseen levels. With the support of radical groups, RKK and GMI, BRN-C became the backbone of the new generation of militants by successfully mobilizing the deep-rooted resentments toward the abuses, exploitation, corruption, and injustice of Thai officials to justify the civilian killings and indiscriminate violence.<sup>16</sup> From January 2004 to the end of July 2007, militant attacks have resulted in more than 2,400 deaths and 4,000 injured people. Civilian casualties constitute nearly 90 percent of this total.<sup>17</sup> Transformations in the insurgency's tactics also characterizes the shift away from the old separatist movement to the new more radical insurgents. While insurgents operated out of rural areas along the Thai-Malaysian border before the 2000s, the new generation of fighters would embed themselves in villages and towns, and move within the community.<sup>18</sup> Their tactics evolved into more sophisticated methods and ranged from assassinations of civilian officials and schoolteachers to bombings aimed at crowded markets and other civilian locations such as commercial banks, restaurants, department stores, and hotels.<sup>19</sup>

Attacks on civilians by radicalized militants targeted different groups based on their religious identity. The first category is attacks on Buddhist Thai civilians who work for the government. The second is attacks on ordinary Buddhist Thai civilians, including Buddhist monks. A third category

is ethnic Malay Muslims who disagree with or are perceived as undermining the operations of militants. A fourth category is ethnic Malay Muslims who allegedly collaborated with Thai authorities, such as becoming an informer for the police or a village official.<sup>20</sup> Thai Muslims who do not outwardly support the cause or are in some way supportive of the Thai government are labeled as *munafis* (false believers).<sup>21</sup> For example, Muslim teachers in Thai public schools are *munafiqs* as they are not propagating the “correct” ideology and are supporting the state’s agenda. Consequently, the targeting of civilians and the use of indiscriminate violence appears to have caused a deep split between the older and younger generations of militants. Many elders from other separatist groups, such as PULO, have expressed their concern regarding the level and speed of violence, as well as the deliberate targeting of civilians, including Buddhist monks and Malay civilians,<sup>22</sup> such as the car bomb attack outside a busy Pattani supermarket in 2017, which injured at least sixty people.<sup>23</sup>

Members of the terrorist groups in Thailand do not have a uniform view on religion, and the unifying factor of their “Pattani” identity can be interpreted in many ways. Interviews with many past fighters show that the motivation to join the terrorist groups varies significantly and demonstrates the lack of a “core reason” to join. The two most consistent reasons to join is that the cause is considered an “honor” within some villages, or the members have a familial history of being a part of the insurgency.<sup>24</sup>

To combat rising violence, the Thai government introduced more assimilative policies during the Shinawatra regime. During his two periods of administration, Shinawatra put measures in place such as Martial Law, the Emergency Decree and the Internal Security Act (ISA) through which military got extraordinary powers. These laws were widely criticized on the grounds of granting impunity to military actions that led to widespread abuse of human rights.<sup>25</sup> For example, The Kru Se mosque siege is one of the incidents that show the increasing intensity of the conflict in 2004. On April 28, 2004, over one hundred young men armed with little more than machetes and a few pistols attacked ten police outposts and one police station throughout Pattani, Yala and Songkhla. One thirty-two-man unit attacked a police outpost in Pattani and retreated across the road to the nearby historic Kru Se mosque, where they stayed. As security forces surrounded the mosque and hundreds of local residents assembled to watch the standoff from the main road, a sporadic gunfight continued for about seven hours. The siege ended when the highest military ranking officer on the ground ordered an all-out assault on the mosque, killing all thirty-two militants and one innocent victim who happened to be in the mosque at the time when the raid began and could not get out. By the end of the day, 106 insurgents were killed. Though most of the militants that day were gunned down as they charged outposts in the various locations, in Saba Yoi district (Songkhla), however, nineteen young men, all members of a local football team, were shot to death in what was believed to be an execution.<sup>26</sup>

Police officers interviewed by the authors described their rules of engagement as “shoot to kill,” saying the martial law imposed in the region in January 2004 permitted them to do so. Most, if not all, of the perpetrators who died in the attacks were buried as martyrs by their families and communities. The site of this mosque was considered as sacred by Muslims, ultimately, the military action generated hate for the Thai security officials.<sup>27</sup> The policies of the Thaksin Shinawatra regime sparked a backlash from the Muslim community that further radicalized the groups.<sup>28</sup>

Consequentially, the long-lasting nature of the conflict is generally accepted to be the result of ineffective government policy and ethno-religious divide. Goodwin notes that revolutionary movements are prolonged by economic marginalization but *caused* by excessive political marginalization.<sup>29</sup> Many papers have all discussed the hardline nature of the policies by the Thai government and how they have inflamed tensions. The government has failed to address the ethno-religious tensions and mainly tried to implement assimilation policies disregarding the preservation of Malay-Muslim cultures.<sup>30</sup>

Moreover, Thailand’s counterinsurgency policy (COIN) is largely based on order 66/2523 which was used against communists during the Cold War.<sup>31</sup> This approach primarily adopts traditional COIN approaches to blend security, political, economic solutions and apply them to the southern conflict.<sup>32</sup> Abuza has evaluated COIN measures up until 2011. The results found the government’s

development programs to improve the standard of living had little effect on deterring insurgency attacks.<sup>33</sup> One of the key findings is that police and military received a mass increase in funding and manpower but lacked the necessary intelligence and tactics to appropriately bring down the levels of violence. Weerakajorn reviewed different government policies between 2004–2019 and re-affirms that the COIN strategies across different administrations vary slightly but overall fail to address the cause.<sup>34</sup>

The year 2013 marks an important turning point for the insurgents and the Thai government's COIN efforts. In February 2013, in Kuala Lumpur, the Thai government and the BRN representative, Ustaz Hassan Taib, signed a "General Consensus on Peace Dialogue Process," in which Bangkok affirmed its willingness to "engage in peace dialogue with people who have different opinions and ideologies from the state . . . as one of the stakeholders in solving the Southern Border Provinces problem under the framework of the Thai Constitution."<sup>35</sup> This was the first time the Thai government has publicly recognized an insurgent movement or sought a negotiated settlement.

BRN made five requests on YouTube videos ahead of the first meeting. On the video, Hassan issued five demands: Malaysia serve as mediator rather than facilitator; BRN be recognized as the representative of Pattani Malays in the process; ASEAN, the Organization for Islamic Cooperation and non-government organizations observe the dialogue; detainees be released and arrest warrants on security cases revoked; and Bangkok acknowledge BRN as a liberation—rather than separatist—movement.<sup>36</sup> At the following two meetings, the government said it was considering lifting warrants for the arrest of suspected rebels as a request and BRN representatives agreed to try and reduce violence. In addition, Malaysia proposed an initiative of a ceasefire during Ramadan, but neither the government nor BRN was fully committed. On August 6, a new YouTube video of masked men from BRN stated that they were suspending the peace dialogue with the Thai government because Thailand had not responded to its five demands and ceasefire conditions.<sup>37</sup> Wheeler further criticizes the peace dialogue process for the non-binding nature of the consensus agreement and lack of monitoring mechanisms.<sup>38</sup> An interview of BRN representatives suggests that Bangkok could not convince the insurgents about their commitment to resolve the conflict. BRN perceived the Thai government as "insincere" and "wasting Malay-Pattani people's times" at the negotiation table.<sup>39</sup>

An important shift in COIN strategies was during the Prayuth administration in 2014, where the National Council for Peace and Order (NCPO) significantly increased funding to strengthen security measures. During this time, the number of incidents also increased dramatically.<sup>40</sup>

### ***The temporal patterning of terrorism***

Terrorist attacks occur non-randomly, tend to temporally cluster and exhibit many of the same patterns as other forms of crime.<sup>41</sup> Quantitative analyses demonstrate similar results across different conflict areas including Iraq,<sup>42</sup> Spain,<sup>43</sup> El Salvador,<sup>44</sup> Northern Ireland,<sup>45</sup> Afghanistan,<sup>46</sup> and Israel,<sup>47</sup> amongst others.<sup>48</sup> This clustering is usually explained by either (a) terrorists quickly responding to nearby punitive counter-terror measures or (b) terrorists rationally utilizing an economy of scale and quickly deploying a burst of linked attacks.

Relevant to our study, Siebeneck et al. went a step further and proffered a third potential explanation.<sup>49</sup> They found a statistically significant decrease in frequency of attacks on or around Islamic holidays, and an increase on or around American holidays. The potential importance of public holidays for the likelihood of crime, violence, and terrorism is unsurprising from a routine activities perspective. Public holidays, by their very nature, alter the pattern of everyday life. They might therefore (a) limit staffing within policing and other security functions and lessen guardianship capabilities (b) bring large congregations of people together and increase victimization opportunities (c) change the environment in which potential offenders are thinking through costs and benefits of action. Based on the Rational Choice Theory perspective, we assume that terrorist attacks are bounded by rationality.<sup>50</sup> Thus, the terrorist calculates the potential risks and makes a strategic choice on where, when, who, and how to attack. Would-be offenders may also choose to participate in the holiday activities rather than conducting criminal or violent activities.<sup>51</sup>

Hassner identifies four factors that may increase or reduce the chances of a conflict by altering offenders' strategic calculation: vulnerability, constraint, motivation, and outrage.<sup>52</sup> He argues that attacks will occur on sacred dates if the force multipliers (vulnerability and motivation) outweigh the force dividers (constraint and outrage). However, his framework doesn't explain which factors are likely to prevail in any given case.<sup>53</sup> We argue that not all holidays have the same effect on the occurrence of terrorist attacks because suggested mechanisms of the attacks on holidays (*vulnerability, constraint, motivation, and outrage*) do not affect public, Islamic, and Buddhist holidays in the same way. Indeed, the best available evidence on the impact of holidays on crimes demonstrates the relationship heavily depends on the form and function of the holiday itself.<sup>54</sup>

In a terrorism context, specific religious holidays may grant offenders an increased sense of courage or enthusiasm. Symbolism of a specific date is additionally important if it adds legitimacy or reinforces their cause. The line of research on the role of the interpretation of the Quran by insurgents suggests that Jihadist groups such as ISIS interpret Ramadan to be a month of Jihad and Martyrdom. During the holy month such actions are expected to have a multiplicative effect on the "spiritual rewards" and "benefits" that Jihadists may receive in turn.<sup>55</sup> Given that the insurgent groups in Thailand have switched their focus towards *munafiqs* (false believers) in early 2000s, it is possible that they are seeking higher spiritual rewards and, accordingly, plan their attacks on Islamist holidays. In other words, on Islamic holidays, Islamic terrorists have a higher motivation to attack the government than other days.

**Hypothesis 1 (H1):** Islamic holidays will experience higher levels of terrorist violence compared to other dates.

As aforementioned, the logic and targets of each of the insurgents vary significantly although they do share the same fundamental belief in an independent Pattani state and the promotion of their Muslim identities, an identity which has been suppressed by the Thai government. Moreover, public holidays have ties or links to the Royal Family and celebrate many symbols and anniversaries that oppress the Muslim insurgents' cause. For example, Songkran (Thai New Year of the Buddhist tradition) and New Year's Eve and Day are celebrated as a public holiday and people take those days off from work, while the Islamic New Year, also called "Hijri New Year" (a beginning of a new lunar year is observed by most Muslims on the first day of the month of Muharram) is not recognized as a public holiday by the Thai government. The lack of equal treatment for Muslim and Thai New Year may be perceived as discrimination of Islamic identity by the Muslim community.

Chakri Day and Constitutional Day are two public holidays that celebrate the monarchy in Thailand. Chakri Day commemorates the establishment of the Chakri Dynasty by Phra Buddha Yodfa Chulaloke (Rama I) in 1782. Constitutional Day thanks the monarchy for limiting its power. By tradition and constitutional requirement, the King of Thailand must be a Buddhist.<sup>56</sup> The constitutional monarchy system in Thailand attempts to use written constitutions and other basic laws to organize power in ways that protect and preserve Buddhist teachings and institutions.<sup>57</sup> In a nutshell, historically, the Head of State functions not only as a figure head but also as a leader of the Armed Forces and Upholder of the Buddhist faith.<sup>58</sup> Therefore, for Muslim insurgents, holidays that celebrate the head of the State also celebrate the Buddhist religion and state practices which oppress the Malay-Muslim identity to protect the Buddhist religion. The oppressive practices include banning the use of Malay language in schools and government and enforcing instruction in Thai by Buddhist monks and banning Islamic dress.<sup>59</sup> Oppression has also manifested in economic life of the Muslim-majority region. Southern Thailand was economically marginalized compared to the rest of the country: household income declined precipitously from the 1960s and average household income in the south was just over half that of the national average.<sup>60</sup>

Since public holidays are a tool used to strengthen the identity of Monarchy, it is expected that public holidays provide a strong motivation for terrorists to attack. Another multiplier factor, "the vulnerability of the target," also tends to be high on public holidays. Since public holiday dates are days off for the residents of Thailand, people gather as big groups at public locations for celebration purposes. For example, on New Year's Eve, Thai people and overseas tourists join New Year countdown events where parties and firework



displays take place. Overcrowded venues can be seen as “easy targets” by terrorist groups. Therefore, we expect terrorist attacks to cluster around public holidays as hypothesized below:

**Hypothesis 2 (H2):** Thai public holidays will experience higher levels of terrorist violence compared to other dates.

Thailand also celebrates Buddhist holidays. Terrorists might have a motivation to attack on Buddhist holidays because it is in line with the Jihadist ideas that aim to make Islam a prominent religion. The idea of interrupting a Buddhist celebration might motivate terrorists who value spiritual rewards. However, previous research by Reese et al. argued that support from a wide range of local communities was essential for the success of insurgencies.<sup>61</sup> This is particularly relevant to groups which are motivated by religious and political goals, as in most cultures the disturbance of an observance of a religious holiday is a serious normative violation.<sup>62</sup> The sacred nature of Buddhist holidays is expected to lower the probability of terrorist incidents by increasing both the constraints and outrage. First, terrorists are constrained by their hesitancy to create a backlash resulting from attacks that might provoke a disproportionate response. “The initiator of an attack may choose to display self-restraint during a target’s holy day in order to placate audiences that share a religious identity with the target.”<sup>63</sup> Second, the Buddhist population is not limited to Thailand. Many countries including Cambodia, Japan, Myanmar, and Taiwan have high Buddhist populations. An attack that targets a Buddhist holiday is likely to lead to an outrage from third parties, more specifically, the Buddhist community outside of Thailand. This leads to our third hypothesis as follows:

**Hypothesis 3 (H3):** Buddhist holidays will experience lower levels of terrorist violence compared to other dates.

## Research design

### Data

This research explores the role of religious (Islamic and Buddhist) and secular (public) holidays in Thailand in determining the likelihood of a terrorist attack within the three most southern provinces. Daily terrorism data is taken from ACLED. The dataset was chosen as it gathers information from a wide variety of local databases such as ISRANEWS and Deep South Watch. The dataset includes a total of 5,949 incidents within the three regions (Pattani, Narathiwat, Yala) from 2010–2021. All incidents that involved violence as defined by ACLED’s codebook (Protests, Riots, Explosions/Remote Violence, Battles, and Violence against Civilians) were included in the dataset. Non-violent incidents such as “Peaceful Protests” and “Strategic Developments” were removed.

Data regarding holidays was manually constructed to include all dates of the different types of holidays. **Table 1** demonstrates the various holidays and the length of each holiday. The holidays were divided into three different groups: Islamic, Buddhist, and public. For Islamic holidays, the five most important holidays in Islamic culture while also being widely observed in Thailand were chosen. As Thailand is not a Muslim-majority country, Islamic holidays are not national holidays. Further, with Thailand’s Muslim population being overwhelmingly Sunni, Shia holidays such as “Ashura” were not selected. On the other hand, Buddhist holidays that are national holidays were chosen. The chosen Buddhist holidays are also considered to be key dates in Theravada Buddhist belief. These dates are accompanied by nation-wide celebrations with temples and fairs being organized. Finally, the selection of public holidays involves the most consistent holidays where the public receive time off. Thailand has many national holidays, but the selection of holidays often changes according to the ruling Monarch and other holidays can change yearly. For example, July 28 is a recently added holiday that marks King Rama X’s birthday, a holiday which was not present until 2017. Therefore, holidays that have not consistently appeared in all the examined dates were not included. As both the Buddhist and Islamic holidays follow their individual lunar calendars, for the analysis these dates are adjusted to match the Gregorian calendar accordingly.

**Table 1.** Holidays, length, and purpose

Holiday	Length in days	% Days per Year	Holiday Purpose
Buddhist	4	1.1	
Makha Buja	1		Buddha's meeting with his disciples
Vesak	1		The birth, enlightenment, and death of Buddha
Asalha Buja	1		Buddha's first sermon and the creation of Sangha
Vassa	1		Beginning of Buddhist lent
Islamic	39	10.7	
Ramadan	30		Holy fasting month
Eid al-Fatir	3		The end of Ramadan
Eid-al-Adha	4		Ibrahim's willingness to sacrifice his son for God
Mawlid al-Nabi	1		Prophet Muhammad's birthday
Al Hijra	1		Islamic New Year
Public	8	2.2	
Songkran	3		Thai New Year
New Year's Eve	1		New Year's Eve
New Year's Day	1		New Year's Day
Chakri Day	1		The beginning of the Chakri dynasty
Constitutional Day	1		Thailand's transition from an absolute monarchy to constitutional monarchy
Labor Day	1		Commemoration of workers of Thailand

Taking the nature of the different groups and their motives into consideration three different control variables were added to the model: Political Freedom, Annual Budget for Counterinsurgency Program, and General Elections. The political freedom information is taken from the “Freedom House” dataset.<sup>64</sup> The political freedom scores are based off “Political Rights” and “Civil Liberties” score, then, they are used to label countries as “Free,” “Partially Free,” or “Not Free.” Political freedom score is controlled for this study because many scholars have theorized that the suppression of the Pattani or Malay-Muslim identity is a key contributing factor to the violence.<sup>65</sup> These scores have changed multiple times from 2010–2021.<sup>66</sup>

The second control deals with the counterinsurgency budget, known as the “งบดับไฟใต้” (ngob-dab-fai-tai) which translates to “budget to extinguish the Southern-Fire.” During the beginning of the Prayuth administration, 2014, there was a significant increase in the amount of money being given to military and other security personnel to control the violence in the south. The budget has significantly dropped off since 2017.<sup>67</sup> The increase in security personnel and military presence is thought to provoke a reaction from the insurgents but may also lead to less incidents as there are more security forces present. Between 2010–2021, an average of 19.3 billion Thai baht or 428 million British pounds was spent on counterinsurgency policies. With 2016 being the highest amount of expenditure (30.8 billion baht or 684 million pounds) and 2021 being the lowest (8.29 billion baht or 184 million pounds).

Lastly, the dates near the general Thai election are also included. Elections dates are often accompanied with electoral violence as it is seen as the propagation of the government's agenda.<sup>68</sup> Elections in Thailand are often pushed back and do not usually occur in a sequential manner. Therefore, only the three general elections of 2011, 2014, and 2019 are included as controls. All dates within 30 days of elections are coded as a dummy variable “election” being valued as 1.

## Method

The effect of the different predictor holidays was tested against the count of incidents per day from the year 2010–2021. As the dependent variable is measured in a count format and as the data suffered from overdispersion, the two alternative tests Quasi-Poisson and Negative Binomial Regression were the most appropriate tests.<sup>69</sup> Below, [Figure 1](#) compares how well these two models predict the observed values of our dependent variable. From the figure, we see that the Negative Binomial model is superior to the Poisson model. Therefore, we will employ negative binomial regression to test our theoretical predictions.



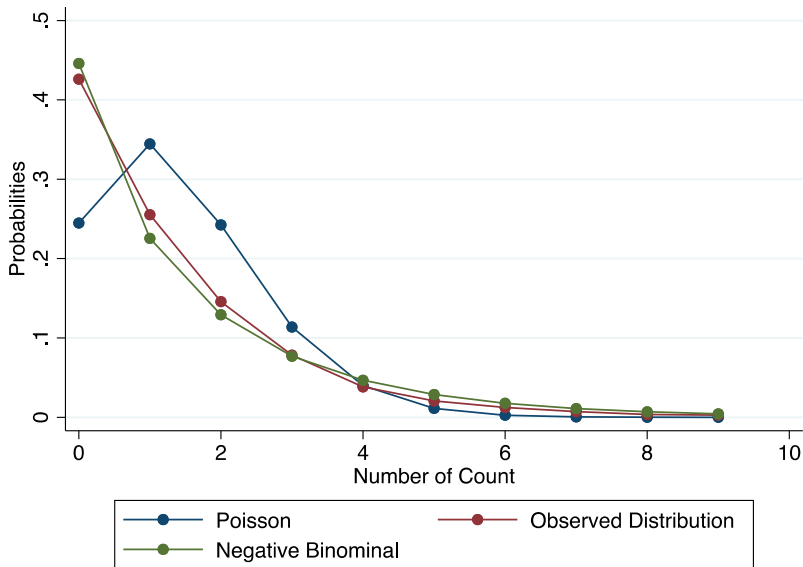


Figure 1. Comparison between observed counts and predicted counts.

Another threat to the assumptions of the result is the risk of zero-inflation. This occurs when there are more zeroes observed than the expected number of zeroes. The zero counts were tested for each of the models and none of the models had zero-inflation.<sup>70</sup>

## Results

Both overall number of attacks and the deadliness of the attacks decreased over time between the years of 2010 and 2021 (see Figure 2 and Figure 3). The patterns are very similar which suggests that attacks have not become deadlier. As less attacks occur, we also observe less fatalities. Examining Figure 2, attacks cluster and increase during certain periods of the year. This trend is in line with our expectation that a temporal preference is often found within offenders.

Table 2 provides a comprehensive summary of the number of incidents and fatalities by different holidays. Most attacks occur on non-holidays. However, as the length of each holiday group is not equal (see Table 1), incidents must be measured against the total number of holiday dates. As seen in Table 2's "Average Attack per Holiday," Islamic holidays from 2010–2021 is by far the group with the most attacks. Islamic holidays experienced an average of 1.58 attacks, a higher figure than the second highest average attack (1.13). Each holiday group experienced at least one attack per holiday. Additionally, the summary of fatalities caused by these attacks are presented in Table 3.

Table 4 summarizes our main results. We first test whether holidays, in general, are any different than non-holiday dates. Model 1 shows no significant relationship between "all holidays" and terrorist attacks. Models 2–4 display the results of the regression of each individual holiday type.

In line with **hypothesis 1**, model 2 suggests that Islamic holidays significantly increased the likelihood of terrorist attack occurrence compared to all other dates, when all other variables are kept at constant. Next, models 3 and 4 examines the effect of Buddhist holidays and public holidays respectively on the number of attacks. These holidays had the opposite effect compared to Islamic holidays. During Buddhist and public holidays, the likelihood of terrorist attacks significantly decreased. These findings provide support for **hypothesis 3** on Buddhist holidays. **Hypothesis 2** concerning public holidays is not supported.

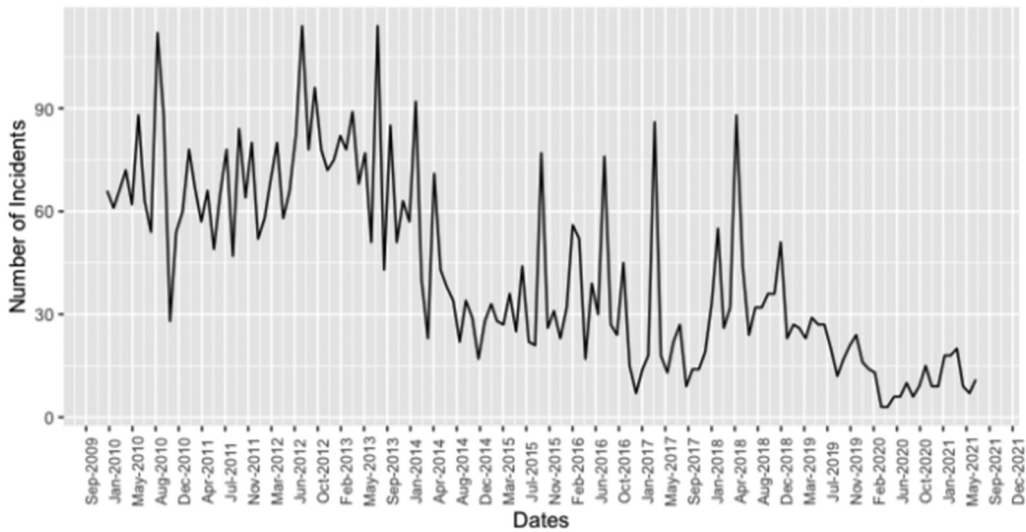


Figure 2. Number of attacks in Pattani, Narathiwat, and Yala.

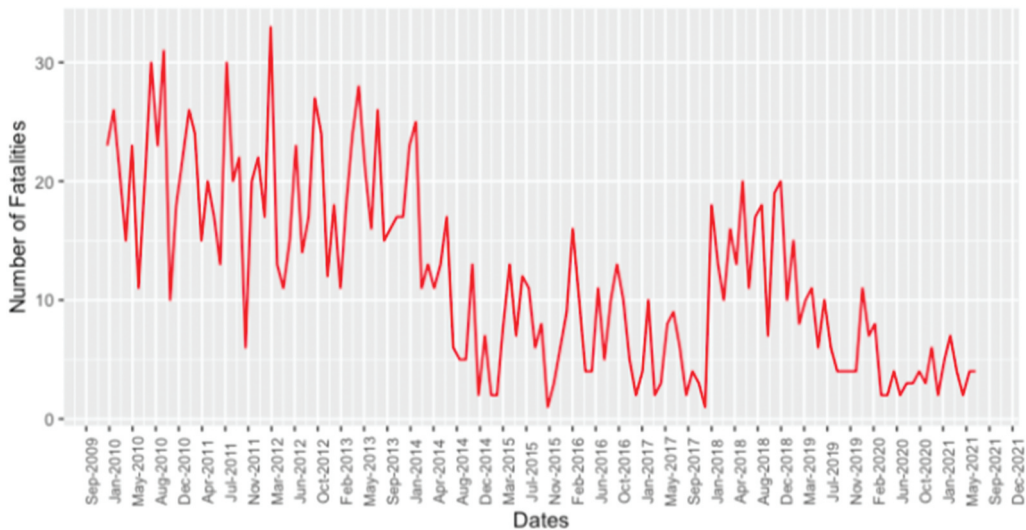


Figure 3. Number of fatalities in Pattani, Narathiwat, and Yala.

Significant and opposite effects of different holidays indicate that holidays should not be analyzed as one homogenous group. Moreover, the various holidays included within the three main types of holiday groups have differing symbolic meanings and variety of celebration rituals. For example, Ramadan and Al Hijra are both Islamic holidays but Ramadan is attributed a higher significance and celebrated for a longer time compared to Al Hijra. We further investigate individual holidays and present corollary findings in Table 5.

It is important to note that the Ramadan and Eid al-Fatir were grouped together as they are interlinked holidays. The holidays of Ramadan and Eid al-Fatir show a strong significant increase on the number of terrorist incidents. However, during the Eid-al-Adha holidays, terrorist attacks significantly decreased. Different Islamic holidays experience different levels violence. On the other hand, Mawlid and Al-Hijra didn't appear to affect the level of violence.

**Table 2.** Summary of attacks by holidays (% in parentheses)

Year	Buddhist	Islamic	Public	Non-Holiday	Total
2010	9	116	16	673	814
2011	9	104	12	670	795
2012	8	109	13	775	905
2013	11	115	15	743	884
2014	4	56	6	436	502
2015	1	47	3	347	398
2016	1	47	7	381	436
2017	3	14	10	234	261
2018	3	74	8	405	490
2019	3	31	7	235	276
2020	1	4	1	103	109
2021	1	21	3	67	92
Total Attack	54 (0.9)	738 (12.4)	101 (1.7)	5069 (85)	5962
Average Attack per Holiday	1.13	1.58	1.08		
Average Attack per Year	4.5	61.5	8.42		

**Table 3.** Summary of fatalities by holidays (% in parentheses)

Year	Buddhist	Islamic	Public	Non-Holiday	Total
2010	3	42	4	283	332
2011	4	51	5	297	357
2012	5	47	4	275	331
2013	15	37	14	337	403
2014	5	37	4	169	215
2015	0	16	3	105	124
2016	0	13	2	119	134
2017	1	19	0	62	82
2018	4	35	4	178	221
2019	1	13	3	114	131
2020	0	7	1	71	79
2021	0	9	2	26	37
Total Fatalities	38 (1.6)	326 (13.3)	46 (1.9)	2036 (83)	2446
Average Fatalities per Holiday	0.8	0.7	0.5		
Average Fatalities per Year	3.2	27.2	3.8		

**Table 4.** Negative binomial regression results (DV = Attacks)

	(Model 1)	(Model 2)	(Model 3)	(Model 4)
	Attacks	Attacks	Attacks	Attacks
All Holidays	0.05(0.05)			
Islamic Holidays		0.12*(0.06)		
Buddhist Holidays			-0.27*(0.13)	
Public Holidays				-0.25*(0.11)
Political Freedom	0.86***(0.21)	0.86***(0.21)	0.86***(0.21)	0.86***(0.21)
COIN Budget	0.00004*(0.00)	0.00004*(0.00)	0.00004*(0.00)	0.00004*(0.00)
General Election (<30 Days)	0.27(0.40)	0.28(0.40)	0.28(0.40)	0.27(0.40)
N	4227	4227	4227	4227
r2	0.03	0.03	0.03	0.03

Year-clustered robust standard errors in parentheses.

\*p < .05, \*\*p < .01, \*\*\*p < .001

Similarly, among Buddhist holidays, Asalha Buja and Vesak holidays had a significant negative impact, but the other two holidays did not. And, among public holidays, only New Year and Constitutional Day had significantly fewer terrorist attacks.

**Table 5.** Negative binomial regression results of individual holidays

	Attacks
<b>Islamic</b>	
Ramadan/ Eid al-Fatir	0.22**(0.08)
Eid al-Adha	-0.69*(0.26)
Mawlid al-Nabi	0.001(0.44)
Al-Hijra	-0.18(0.29)
<b>Buddhist</b>	
Asalha Buja	-0.76*(0.32)
Vesak	-0.51*(0.26)
Vassa	0.13(0.27)
Makha Buja	-0.15(0.27)
<b>Public</b>	
New Year's Eve/Day	-0.79***(0.24)
Constitutional Day	-1.15***(0.30)
Songkran	-0.18(0.16)
Chakri Day	0.71(0.54)
Labor Day	-0.56(0.36)
N	4227
r <sup>2</sup>	0.03

Year-clustered robust standard errors in parentheses.

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

Controls are excluded from the table.

## Discussion

This study found that Islamic holidays witnessed an increase in violence during the period studied, whilst other types of holidays saw a decrease. This is in line with our initial hypotheses about Islamic and Buddhist holidays, but contrary to our hypothesis regarding public holidays. Even though terrorists have a higher motivation to attack and people who gather in public places are vulnerable, our analysis shows that public holidays will experience lower levels of terrorist violence compared to other dates. It can be argued that the self-constraining mechanism is not unique to religious holidays; it applies to public secular holidays, too. When we argued that Buddhist holidays will experience less violence, we discussed that offenders may self-restrain themselves on their target's sacred days in order to placate groups that have a common religious identity with the target.<sup>71</sup> It is possible that Malay-Muslim insurgents hesitate to attack on public holidays such as New Year's Eve because they try to avoid a public backlash from various segments of the society who celebrates the new year. They could also be choosing to spend this time with friends and family rather than their extremist colleagues. As Cohn and Rotton contend, "even criminals take a holiday."<sup>72</sup>

Our findings on the Islamic holidays in general and Ramadan more specifically are crucial. This is because prior research on the matter shows contradictory results. We add to this discussion by analyzing a case that had not been analyzed before: Thailand. The case of Thailand is important because it is different than most studied cases like Afghanistan and Iraq in the sense that Muslims constitute only a minority in the country. This is a study of a single country and in a confined temporal period. The degree to which the findings apply to other conflict sites or ideological groups remains unknown and requires further replication.

Another important finding is that Islamic Holiday of Eid-al-Adha experienced less violence while Ramadan and Eid-al-Fatir experienced more. This could be because Eid-al-Adha is less widely celebrated than the aforementioned holidays and less publicly recognized in Thailand. Therefore, it can be argued that offenders attribute less heroic value to Eid-al-Adha. This also explains why other Islamic holidays that are celebrated even less do not show any significant effect at all.

Lastly, an alternative explanation for the opposite effect of Islamic holidays compared to the Buddhist and public holidays is possible. As mentioned, in Thailand, Malay-Muslims are the minority while the public and Buddhist holidays represent the majority group's values. Our findings suggest a dynamic relationship between the ideology of the terrorist group and the type of the holiday. When

the ideology of the terrorist group and the ideology of the holiday match, as in Islamic holidays, we observe more violence. However, when the ideology of the holiday is different than the ideology of the terrorist group, as in Buddhist and public holidays, we observe less violence. The direction of the correlation between holidays and attacks might be determined by whether the ideology of the terrorist group and the ideology of the holiday align. Additional research on different countries with different demographics is needed to explore this argument further.

Our other explanatory variables also provide important insights to the literature on counterinsurgency. In our empirical analysis, we controlled for the effect of COIN budgets on terrorist activities. The results suggested that increasing spending on counterinsurgency policies significantly increase the number of terrorist attacks in a given year (Table 4). This can be interpreted as the increase in security personnel and military presence provokes a reaction from the insurgents instead of deterring potential attacks. It is possible that governments consider holidays to be important dates to protect but they struggle to recruit security forces to work on holidays. However, governments' failure to recruit sufficient security personnel shouldn't decrease the number of terrorist activities based on our findings showing that increased COIN efforts, measured as COIN budget, overall does not reduce violence. Even though the data on active security personnel on holidays and how the budget on counterinsurgency policies is spent is not available, COIN budget is the best possible operationalization to measure policing activities.

## Conclusion

The study of terrorist events and the ability to predict their occurrence over time has typically been the remit of political science. More recently, a growing number of studies have utilized criminological insights. This paper analyzed terrorist incident distribution patterns around public holidays and models the variations in victimization risk compared to non-holidays. Analogous to volume crime incidents, the paper demonstrated that terrorism acts do not occur randomly. Instead, they cluster, with a particularly larger clustering happening around specific religious holidays associated with the Muslim faith. The bounded rationality of terrorist groups in making tactical decisions effectively precludes distribution by chance alone. Although a couple of studies have illustrated elevated temporal risk around religious holidays, our research shows that the patterns of clustering differ depending on type of public holidays, as well as within types of religious holidays. Further investigations should consider the spatial distribution of attacks and whether groups change the location of their violence across different dates.

In many ways, this paper addresses many of the limitations Freilich et al note about the literature on terrorism which utilizes an environmental criminological perspective.<sup>73</sup> First, they note that most of the literature is focused on either the Middle East or the Western world. This study widens the scope by looking beyond Islamic holidays, by disaggregating Islamic holidays, and by looking beyond the Middle East. Freilich et al. also note that most quantitative papers draw from similar open-source data like the Global Terrorism Database. This paper contributes to the literature also by utilizing data from Armed Conflict and Locations Events Data (ACLED).

This paper equally makes it apparent that caution must be exercised in extrapolating findings from one conflict to another. Access to more detailed data may permit the examination of patterns for specific attack types that our findings (in relation to more and less organized attacks) suggest would be valuable. In particular, given the way the conflict has evolved, consideration of the perpetrating group(s) responsible for attacks may be of particular value. Unfortunately, this was not possible using ACLED or other open-source data like GTD because of the high rates of unattributed attacks.<sup>74</sup>

Another limitation of this study is that only data from 2010–2021 taken from the ACLED dataset were included. A more appropriate cutoff point would be from 2004 when the intensity of the conflict escalated significantly following major clashes such as the Kru Se mosque siege in 2004. However, due to difficulty in accessing databased obtaining data prior to 2010 was not possible. Nonetheless, 2010 offers a viable alternative starting point as it also marks the year where the Abhisit's cabinet ceded its powers to Yingluck Shinawatra's cabinet, which had focused on building rapport and a ceasefire. The conflict escalated significantly under the 2014 Interim government.<sup>75</sup>

Within the study of terrorism, there has been a disproportionate level of interest in the terrorist rather than the terrorist event. This is also true in public policy. Issues like the drivers of radicalization have taken center stage. There is a fixation with understanding pre-crime risk factors at the expense of understanding the behaviors that underpin the terrorist act itself. Whilst obviously important, the fascination with radicalization and its prevention offers a great deal of conceptual, political, and practical difficulties. In our rush to prevent at-risk individuals attaining extremist ideologies, the research community has generally forgotten about the means by which we can prevent terrorist attacks in a practical manner. Of those studies that do focus upon terrorist events, they typically correlate “root causes” like poverty or education, the types of variables that are not malleable for the average high-powered politician let alone the average counterterrorism practitioner. This paper offers a practical application of quantitative techniques that, with further granular level analyses, may provide an effective means of guiding counterterrorism resources. It thereby contributes to the scientific understanding of terrorist behavior, its bounded rationality and predictability. Our findings can be utilized by law enforcement and policy makers of counterterrorism efforts to develop appropriate resourcing and preventative countermeasures. The degree to which this is applicable beyond Thailand requires further replications in other contexts.

## Disclosure statement

No potential conflict of interest was reported by the author(s).

## Data availability statement

The data that support the findings of this study are available from the corresponding author, Cigdem Unal, upon reasonable request.

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1. Deep South Watch, "Deep South Watch Database," last modified 2021, <https://deepsouthwatch.org/th> (accessed September 6, 2021).
2. Zachary Abuza, "The Ongoing Insurgency in Southern Thailand: Trends in Violence, Counterinsurgency Operations, and the impact of National Politics" (No. 6, National Defense University Press, Washington, DC, 2011).
3. Paul Chambers, Srisompob Jitpiromsri, and Napisa Waitookiat, "Introduction: Conflict in the Deep South of Thailand: Never-Ending Stalemate?" *Asian International Studies Review* 20, no. 1 (2019): 1–23.
4. Paul J. Brantingham and Patricia L. Brantingham, *Patterns in Crime* (New York: Macmillan, 1984); Ronald V. Clarke, "Situational Crime Prevention," *Crime and Justice* 19 (1995): 91–150; Lawrence E. Cohen and Marcus Felson, "Social Change and Crime Rate Trends: A Routine Activity Approach," *American Sociological Review* 44, no. 4 (1979): 588–608.
5. Timothy Carter, "Explaining Insurgent Violence: The Timing of Deadly Events in Afghanistan," *Civil Wars* 13, no. 2 (2011): 99–121.
6. Monica Duffy Toft and Yuri M. Zhukov, "Islamists and Nationalists: Rebel Motivation and Counterinsurgency in Russia's North Caucasus," *American Political Science Review* 109, no. 2 (2015): 222–38.
7. Michael J. Reese, Keven G. Ruby, and Robert A. Pape, "Days of Action or Restraint? How the Islamic Calendar Impacts Violence." *American Political Science Review* 111, no. 3 (2017): 439–59.
8. Ron E. Hassner, "Sacred Time and Conflict Initiation," *Security Studies* 20, no. 4 (2011): 491–520.
9. Clionadh Raleigh, Rew Linke, Håvard Hegre, and Joakim Karlsen, "Introducing ACLED: An Armed Conflict Location and Event Dataset," *Journal of Peace Research* 47, no. 5 (2010): 651–60.
10. D. Pathan and J. C. Liow, "Confronting Ghosts: Thailand's Shapeless Southern Insurgency." *Lowy Institute for International Policy*, no. 30 (2010): 1–116.
11. Mark S. Cogan and Vivek Mishra, "Regionalism and Bilateral Counter-Terrorism Cooperation: The Case of India and Thailand," *Journal of Policing, Intelligence and Counter Terrorism* 16, no. 3 (2021): 245–66.
12. Srisompob Jitpiromsri, "The Deep South of Thailand: 15 Years in Fields of Open Conflict, Violence and Peace Narratives," *Asian International Studies Review* 20, no. 1 (2019): 79–108.
13. Pathan and Liow, "Confronting Ghosts."
14. International Crisis Group, "Jihadism in Southern Thailand: A Phantom Menace" (Report 291/Asia), last modified 2017, [https://icg-prod.s3.amazonaws.com/291-jihadism-in-southern-thailand-a-phantom-menace\\_1.pdf](https://icg-prod.s3.amazonaws.com/291-jihadism-in-southern-thailand-a-phantom-menace_1.pdf) (accessed March 20, 2023).
15. See note 13 above.
16. Human Rights Watch, "It Was Like Suddenly My Son No Longer Existed': Enforced Disappearances in Thailand's Southern Border Provinces," 19, no. 5(C) (March 2007), <http://hrw.org/reports/2007/thailand0307/> (accessed March 20, 2023) <https://www.hrw.org/reports/2007/thailand0807/2a.htm>.
17. Deep South Watch, "Deep South Watch Database."
18. See note 13 above.
19. Human Rights Watch, "It Was Like Suddenly My Son No Longer Existed."
20. *Ibid.*
21. See note 13 above.
22. See note 19 above.
23. L. Cochrane, "Car Bomb Attack Outside Busy Pattani Supermarket in Thailand Injures at Least 60," *ABC News*, May 9, 2017, <https://www.abc.net.au/news/2017-05-10/car-bomb-attack-outside-thailand-supermarket-injures-60/8512732> (accessed March 20, 2023).
24. Marc Askew and Sascha Helbardt, "Becoming Patani Warriors: Individuals and the Insurgent Collective in Southern Thailand," *Studies in Conflict & Terrorism* 35, no. 11 (2012): 779–809.
25. M. S. Najish, "Analysing the Causes of Unrest in Southern Provinces and its Impact on Democratization of Thailand," *International Affairs and Global Strategy* 59 (2017).
26. See note 13 above.
27. Aurel Croissant, "Muslim Insurgency, Political Violence, and Democracy in Thailand," *Terrorism and Political Violence* 19, no. 1 (2007): 1–18.
28. Chris Wilson and Shahzad Akhtar, "Repression, Co-optation and Insurgency: Pakistan's FATA, Southern Thailand and Papua, Indonesia," *Third World Quarterly* 40, no. 4 (2019): 710–26.

29. Jeff Goodwin, *No other Way Out: States and Revolutionary Movements, 1945–1991* (Cambridge University Press, 2001).
30. Chambers, Jitpiromsri, and Waitoolkiat, “Introduction”; Jitpiromsri, “The Deep South of Thailand; Srisompob Jitpiromsri, Md Mahbulul Haque, and Paul Chambers, “Peacebuilding in Thailand’s Deep South and in Myanmar/Burma: The Dynamic Roles of Muslim Minorities in Conflict Societies,” *Asian Affairs: An American Review* 48, no. 1 (2020): 85–110; Srisompob Jitpiromsri and Suwara Kaewnuy, “Chapter 5: Conflict Transformation and Public Opinion in Thailand’s Deep South During the Period from 2015 to 2017,” *Asian Affairs: An American Review* 45, no. 2 (2018): 119–38.
31. C. Weerakajorn, “Counterinsurgency in the Deep South of Thailand: A Continuing Failure?” *Small Wars Journal* (2019). <https://smallwarsjournal.com/jrnl/art/counterinsurgency-deep-south-thailand-continuing-failure> (accessed March 20, 2023).
32. Chambers, Jitpiromsri, and Waitoolkiat, “Introduction”; Jitpiromsri, “The Deep South of Thailand; Jitpiromsri, Haque, and Chambers, “Peacebuilding in Thailand’s Deep South and in Myanmar/Burma”; Jitpiromsri and Kaewnuy, “Chapter 5: Conflict Transformation and Public Opinion in Thailand’s Deep South During the Period from 2015 to 2017.”
33. Abuza, “The Ongoing Insurgency in Southern Thailand.”
34. Weerakajorn, “Counterinsurgency in the Deep South of Thailand.”
35. “General Consensus on Peace Dialogue Process,” February 28, 2013, [https://peacemaker.un.org/sites/peacemaker.un.org/files/TH\\_130228\\_GeneralConsensusPeaceProcess.pdf](https://peacemaker.un.org/sites/peacemaker.un.org/files/TH_130228_GeneralConsensusPeaceProcess.pdf).
36. Matthew Wheeler, “Thailand’s Southern Insurgency,” *Southeast Asian Affairs* 2014, no. 1 (2014): 319–35.
37. See note 19 above.
38. Wheeler, “Thailand’s Southern Insurgency.”
39. See note 34 above.
40. International Crisis Group, “Southern Thailand’s Peace Dialogue: Giving Substance to Form,” (Report 304/Asia). last modified 2020, <https://www.crisisgroup.org/asia/south-east-asia/thailand/304-southern-thailands-peace-dialogue-giving-substance-form> (accessed November 17, 2019).
41. Zoe Marchment and Paul Gill, “Terrorists are Just Another Type of Criminal,” in *Routledge Handbook of Crime Science* (Routledge, 2018), 233–51.
42. Michael Townsley, Shane D. Johnson, and Jerry H. Ratcliffe, “Space Time Dynamics of Insurgent Activity in Iraq,” *Security Journal* 21 (2008): 139–46; Shane D. Johnson and Alex Braithwaite, *Spatio-temporal Modelling of Insurgency in Iraq* (Criminal Justice Press, 2009); Richard M. Medina, Laura K. Siebeneck, and George F. Hepner, “A Geographic Information Systems (GIS) Analysis of Spatiotemporal Patterns of Terrorist Incidents in Iraq 2004–2009,” *Studies in Conflict & Terrorism* 34, no. 11 (2011): 862–82.
43. Gary LaFree, Laura Dugan, Min Xie, and Piyusha Singh, “Spatial and Temporal Patterns of Terrorist Attacks by ETA 1970 to 2007,” *Journal of Quantitative Criminology* 28 (2012): 7–29.
44. Brandon Behlendorf, Gary LaFree, and Richard Legault, “Microcycles of Violence: Evidence from Terrorist Attacks by ETA and the FMLN,” *Journal of Quantitative Criminology* 28 (2012): 49–75.
45. Stephen Tench, Hannah Fry, and Paul Gill, “Spatio-temporal Patterns of IED usage by the Provisional Irish Republican Army,” *European Journal of Applied Mathematics* 27, no. 3 (2016): 377–402.
46. Gian Maria Campedelli, Mihovil Bartulovic, and Kathleen M. Carley, “Learning Future Terrorist Targets through Temporal Meta-Graphs,” *Scientific reports* 11, no. 1 (2021): 8533.
47. Claude Berrebi and Darius Lakdawalla, “How does Terrorism Risk Vary Across Space and Time? An Analysis Based on the Israeli Experience,” *Defence and Peace Economics* 18, no. 2 (2007): 113–31; Simon Perry, Robert Apel, Graeme R. Newman, and Ronald V. Clarke, “The Situational Prevention of Terrorism: An Evaluation of the Israeli West Bank Barrier,” *Journal of Quantitative Criminology* 33 (2017): 727–51.
48. Yao-Li Chuang, Noam Ben-Asher, and Maria R. D’Orsogna, “Local Alliances and Rivalries Shape Near-Repeat terror Activity of al-Qaeda, ISIS, and Insurgents,” *Proceedings of the National Academy of Sciences* 116, no. 42 (2019): 20898–903.
49. Laura K. Siebeneck, Richard M. Medina, Ikuho Yamada, and George F. Hepner, “Spatial and Temporal Analyses of Terrorist Incidents in Iraq, 2004–2006,” *Studies in Conflict & Terrorism* 32, no. 7 (2009): 591–610.
50. Paul Gill, Zoe Marchment, Emily Corner, and Noémie Bouhana, “Terrorist Decision Making in the Context of Risk, Attack Planning, and Attack Commission,” *Studies in Conflict & Terrorism* 43, no. 2 (2020): 145–60.
51. Ellen G. Cohn and James Rotton, “Even Criminals Take a Holiday: Instrumental and Expressive Crimes on Major and Minor Holidays,” *Journal of Criminal Justice* 31, no. 4 (2003): 351–60.
52. Ron E. Hassner, “Religious Intelligence,” *Terrorism and Political Violence* 23, no. 5 (2011): 684–710.
53. Reese, Ruby, and Pape, “Days of Action or Restraint?”
54. Cohn and Rotton, “Even Criminals Take a Holiday.”
55. M. Bin Ali, “IS Ramadan Attacks: Perverted Interpretation of Fasting Month” (No. 115, Rajaratnam School of International Studies, June 9, 2017).

56. Benjamin Schonthal, "Formations of Buddhist Constitutionalism in South and Southeast Asia," *International Journal of Constitutional Law* 15, no. 3 (2017): 705–33.
57. Ibid.
58. Laurens de Rooij, "The King and His Cult: Thailand's Monarch and the Religious Culture," in *Religious Transformation in Modern Asia* (Brill, 2015), 274–96.
59. Chris Wilson and Shahzad Akhtar, "Repression, Co-optation and Insurgency: Pakistan's FATA, Southern Thailand and Papua, Indonesia," *Third World Quarterly* 40, no. 4 (2019): 710–26.
60. Croissant, "Muslim Insurgency, Political Violence, and Democracy in Thailand"; International Crisis Group, "Southern Thailand's Peace Dialogue."
61. See note 53 above.
62. Ibid.
63. Hassner, "Sacred Time and Conflict Initiation," 508.
64. Freedom House, "Countries and Territories Ratings 1973–2021," last modified 2021, <https://freedomhouse.org/report/freedom-world> (accessed December 4, 2022).
65. Jitpiromsri, "The Deep South of Thailand."
66. Freedom House, "Countries and Territories Ratings 1973–2021."
67. Isranews, "14 ปีไฟใต้ ะलयบ 3 แสนล าน กองทัพ เชื้อมนั ปีหนาบิดเกม" [14 Years of Southern Fire Has Melted 300000 Billion Baht. The Army Believes Next Year Will be the End], last modified Jan 4, 2018, <https://www.isranews.org/content-page/67-south-slide/62488-success.html>; Thai Government, "ร่างพระราชบัญญัติงบประมาณรายจ่ายประจำปีงบประมาณพ.ศ.2565" [Draft Act on Budget and Expenditures for Annual Budget 2022], last modified 2021, [https://bbstore.bb.go.th/cms/1620609746\\_7887.pdf](https://bbstore.bb.go.th/cms/1620609746_7887.pdf) (accessed November 17, 2019).
68. See note 13 above.
69. Joseph M. Hilbe, *Negative Binomial Regression* (Cambridge University Press, 2011).
70. D. Lüdecke, M. S. Ben-Shachar, I. Patil, P. Waggoner, & D. Makowski, "Performance: An R Package for Assessment, Comparison and Testing of Statistical Models," *Journal of Open Source Software* 6, no. 60 (2021): 3139.
71. Hassner, "Sacred Time and Conflict Initiation."
72. See note 54 above.
73. Joshua D. Freilich, Jeff Gruenewald, and Marissa Mandala, "Situational Crime Prevention and Terrorism: An Assessment of 10 Years of Research," *Criminal Justice Policy Review* 30, no. 9 (2019): 1283–311.
74. Gary LaFree, Laura Dugan, and Erin Miller, *Putting Terrorism in Context: Lessons from the Global Terrorism Database* (Routledge, 2014).
75. International Crisis Group, "Southern Thailand: Insurgency, Not Jihad" (Report 98/Asia, 2005), <https://www.crisisgroup.org/asia/south-east-asia/thailand/southern-thailand-insurgency-not-jihad> (accessed March 20, 2023); International Crisis Group, "Southern Thailand: Moving Towards Political Solutions?" (Report 181/Asia, 2009), <https://www.crisisgroup.org/asia/south-east-asia/thailand/southern-thailand-moving-towards-political-solutions> (accessed November 17, 2019).

## Appendix

**Table A1.** Negative binomial regression results (DV = Fatalities)

	(Model 1)	(Model 2)	(Model 3)	(Model 4)
	Fatalities	Fatalities	Fatalities	Fatalities
All Holidays	0.19**(0.07)			
Islamic Holidays		0.26**(0.10)		
Buddhist Holidays			0.25(0.26)	
Public Holidays				−0.18(0.16)
Political Freedom	0.90***(0.21)	0.90***(0.21)	0.90***(0.21)	0.90***(0.21)
COIN Budget	0.00(0.00)	0.00(0.00)	0.00(0.00)	0.00(0.00)
General Election (<30 Days)	0.34(0.54)	0.35(0.53)	0.32(0.52)	0.33(0.52)
N	4227	4227	4227	4227
r <sup>2</sup>	0.02	0.02	0.02	0.02

Year-clustered robust standard errors in parentheses.

\*p < .05, \*\*p < .01, \*\*\*p < .001