

ANALYTICAL ESSAY

Choosing to Fight, Choosing to Die: Examining How ISIS Foreign Fighters Select Their Operational Roles

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Understanding why and how individuals participate in militant organizations has been the focus of an increasing amount of scholarship. Traditionally, these studies focus at either the individual or organizational level of explanation. This article advances the discussion on individual participation in militant organizations by combining primary and secondary sources at both levels to explain how the Islamic State of Iraq and Syria (ISIS) attracted individuals into its organization as either suicide bombers or frontline fighters. First, at the individual level, we analyze a primary source dataset of over 4,000 personnel files from foreign fighters who went to Syria to join ISIS between 2013 and 2014. Second, at the organizational level, we examine trends in Islamic State propaganda and messaging to see how the recruitment of individuals into the organization placed them on certain operational paths. Two specific takeaways emerge. First, foreign fighters in 2013–2014 volunteered to become suicide bombers with relatively less frequency than in past iterations of the conflict in Iraq and Syria. Second, fighters from Western countries and fighters from countries undergoing a civil war were especially less likely to volunteer for a suicide role. More broadly, this analytical essay makes a case for the value of looking inside an organization as well as at individuals to get a more complete picture about group-level behavior.

Keywords: Terrorism, ISIS, foreign fighters, suicide terrorism, individual vs. group dynamics

Introduction

Within the literature regarding participation in terrorist organizations, there are two general approaches to understand why individuals end up in the roles that they

do within these organizations. One stream of literature notes that individual characteristics seem to influence what an individual does within a terrorist organization (Perlinger, Koehler-Derrick, and Pedahzur 2016; Horgan, Shortland, and Abbasciano 2018; Gill et al. 2019a). The other focuses on the organizational perspective, noting that the group ultimately holds the key to determining tactical choices such as individual roles (Bueno de Mesquita 2005; Bloom 2017; Koehler-Derrick and Milton 2019). We believe that these two general approaches to understanding individual roles in militant organizations, when combined, provide a powerful and nuanced perspective on this important question.

This question of how individual attributes and group actions combine to explain the roles that individuals perform in organizations was particularly salient in the case of the foreign fighter mobilization to the Islamic State of Iraq and Syria (ISIS). Despite the fascination of many with the group's large cadre of foreign suicide bombers, the yearning for martyrdom was only one part of a more complex picture of those who actually traveled to Iraq and Syria to participate in jihad. Plentiful stories of foreigners joining ISIS in search of marriage, out of carnal desire, or to escape personal crises, such as addiction or general anomie, belie any generalization of ISIS foreign fighters as monolithically devoted to suicide martyrdom. Indeed, the Sunni fighter mobilization of 2013–2014, the largest ever Sunni foreign fighter wave, has prompted a call for more research on the perceptions and expectations of foreign fighters, focusing on questions of why they go and, more relevant for this article, what roles they assume when they arrive in the war zone (Borum and Fein 2016; Tezcur and Besaw 2020).

Examining a dataset of just over 4,000 foreign fighter personnel files, we seek to fashion an explanation of suicide volunteering among foreign fighters during the heyday of ISIS, 2012–2014. However, rather than test ahistorical models of the supply side of suicide volunteering, we craft an inductive approach that is sensitive to the particularities of the ISIS mobilization during these years, combining what are traditionally separate approaches in the literature that tackle this issue from both the individual and the organizational level. Our hope is that in taking this approach we can provide a more convincing explanation for the rates of suicide volunteering among ISIS fighters during their most recent foreign fighter mobilization. More broadly, we hope that this approach serves as a proof of concept, which shows that future research efforts can benefit by working across different levels of analysis to examine the important question of how individuals end up in certain organizational roles within militant groups. Moreover, we hope to build greater momentum for studying how individuals take on certain roles with violent organizations.

We briefly preview our findings and approach here. We find that relatively few ISIS recruits in this cohort volunteered for a suicide role compared with the past phase of Al-Qaeda in Iraq's battle against Iraqi and multinational forces. Only 11.4 percent of the foreign fighters in this dataset, most of whom joined between 2012 and 2014, volunteered to die for ISIS. For comparison, this is a marked decline from previously recorded rates of suicide volunteering in ISIS's predecessor organization. In 2006–2007, for instance, rates of suicide volunteering among foreign fighters joining Al-Qaeda in Iraq/the Islamic State of Iraq, reached 56 percent (Felter and Fishman 2007, 18; Dodwell, Milton, and Rassler 2016a). Exploring the data further, we find that for the recent cohort of ISIS fighters, their country of origin is associated with rates of volunteering for a suicide role. The location effect manifests itself in various ways. Least likely to volunteer for a suicide role are fighters who travel from Western countries. Only 5.4 percent of these recruits volunteered for a suicide role. By comparison, fighters from countries undergoing civil war (outside the West) volunteered at a rate of 8 percent. Finally, most likely to volunteer for suicide roles are those who join ISIS after having lived in a non-Western country that is not currently undergoing a civil war, with a suicide volunteer rate of 12.9 percent.

To explain this empirical pattern, we call attention to the Sunni insurgency's transformation from an effort focused on clandestine violence in 2006–2012 to one

aspiring to governance and large-scale war fighting in 2013–2014. We argue that this transformation made possible new propaganda framings that served to attract recruits with less interest in immediate martyrdom compared with the foreign recruits who traveled during 2006–2012. Buoyed by military victories in 2013–2014, ISIS was able to advertise the social and material rewards that accompany participation in jihad. As a result, the organization attracted a larger and more broad-based pool of recruits, but this appeal also discouraged immediate martyrdom for many within this broadened recruit base. Furthermore, we argue that these new propaganda themes resonated disproportionately with prospective foreign fighters from Western countries and from countries with ongoing civil wars. Meanwhile, for those from countries outside the West that were not undergoing civil war, the salient framings for foreign fighting remained similar to those of 2006–2012, predicated on duty and sacrifice and hence more compatible with suicide volunteering.

To elaborate this argument, we decompose Sunni foreign fighter recruitment framings into three ideal types, and we argue that each framing had a varying resonance depending on a fighter's location of origin. First, ISIS propaganda promised *status reversal* for those who began a new life in the Caliphate. Moving to the Caliphate, according to his framing, offered a fresh start, in which foreign recruits could become materially and socially advantaged over others in the community. We argue that this appeal resonated particularly for fighters traveling from Western countries, where there is embitterment from perceived marginalization among some in immigrant communities. The appeal of this pitch, however, discouraged immediate martyrdom, since dying shortly after arrival would obviously preclude enjoying a new life in the Caliphate.

Second, the presentation of Iraq and Syria as the *global jihad's premier battlefield* drew recruits that sought battlefield experience, especially those who imagined for themselves a future as a professional jihadist. We argue that this appeal resonated most strongly for those in countries already embroiled in civil war, since such locations produce a comparatively greater number of individuals with aspirations of becoming a lifelong armed insurgent. Even though involvement on the battlefield implies a high risk of eventual death, the desire to gain such experience discourages immediate martyrdom. As such, rates of suicide volunteering among these recruits are lower than for those who travel from non-Western countries that are not in conflict. Lastly, ISIS propaganda evinces continuities with long-standing jihadist emphasis on the duty to make sacrifices to protect the threatened Sunni community of the Levant. This theme is most conducive to encouraging a suicide role, and we argue that it was comparatively salient for those who traveled from non-Western countries that were not undergoing civil war, where the other two narratives mitigated the desire to volunteer as a suicide operative.

This analytical essay begins by first discussing the relative role that individual- and group-level factors have played understanding why individuals act the way that they do within terrorist organizations. We argue that the bifurcation of explanatory approaches, while each yielding valuable insight, remains a limited way of understanding individual behavior in militant organizations. To demonstrate this, we conduct an analysis of a large number of ISIS personnel forms to understand why an individual expressed a preference to become either a fighter or a suicide operative. The empirical analysis shows that individual characteristics alone are insufficient, and the essay then moves to an elaboration of the propaganda framings created by ISIS that we argue are critical to understand the data analysis. We conclude by discussing how our approach provides new perspectives on researching violent groups and how this approach could lead to novel directions for future scholarly efforts.

Why Do Individuals Behave Certain Ways in Terror Groups?

Before examining the dataset, we want to clarify the goal of this analytical essay. As noted previously, the terrorism studies literature that seeks to explain the

organizational role assumed by terrorist typically falls into two camps, one that examines individual motivations and the other organizational efforts. However, a number of theoretical and empirical challenges exist if these avenues of inquiry are pursued separately, whereas we argue that a number of opportunities for increased research and understanding exist if efforts are made to pursue them jointly.

To see why this is the case, consider the literature seeking to explain the tactic of suicide bombing. Why do individuals choose to engage in this type of behavior? To answer this question, some studies have looked to the individual level, examining how characteristics such as individual psychology, poverty, and personal grievance can motivate individuals to become suicide bombers (Krueger and Malečková 2003; Azam 2005). However, because many of these studies focus exclusively on suicide bombing at the individual level, they inadvertently sidestep the issue that suicide bombing is merely one organizational role among many. Individuals, though they may be interested in joining a terrorist group for the same reasons, ultimately have some form of choice in how that participation will be carried out. However, why an individual might select one as opposed to another is something that remains to be developed at the individual level.

Of course, the choice to implement the tactic of suicide bombing in a campaign is not fully left to the individual. Groups can show, and often have shown, the willingness to both exploit and curtail the use of particular tactics, including suicide bombing. For example, groups may choose to utilize suicide bombing according to their specific strategic goals or their connections to other groups who have this knowledge, regardless of individual motivations (Gupta and Mundra 2005, 590; Horowitz 2010). Additionally, groups may utilize suicide bombing in large measure due to the ideological particularities of their worldview (Moghadam 2009). Ultimately, the group's involvement in the decision to engage in suicide bombing should impact how they message and recruit individuals into organizations, but our understanding how groups achieve this purpose is an area where more research is needed.

Needless to say, suicide bombing is merely one tactic within the realm of terrorism studies in which this need to consider both individual and group perspectives is important. Issue areas where the preferences of groups and individuals impact outcomes are replete throughout the field of terrorism studies (McCormick 2003, 481–90; Kruglanski and Fishman 2009; Doosje et al. 2016; Bacon 2018; Bacon and Arsenault 2019). However, while individual and group perspectives can yield interesting and valuable insights, it is not clear that either is sufficient in isolation to provide a full understanding of why individuals end up expressing a preference to perform certain roles within organizations. This challenge has been noted by scholars of terrorism, but the question regarding ways to remedy this disparity remains (Atran 2003). How does the interplay of individual preferences and attributes work together with the same factors from the group level?

To examine how the combination of these approaches might yield interesting insights, we decided to conduct an examination of how ISIS foreign fighters expressed preferences for roles upon joining the group in Iraq and Syria. In doing so, we felt it more appropriate to approach this analytical essay as an exploratory exercise in theory building, not an explanatory approach to theory testing. In other words, we describe and analyze the data as a means to providing theoretical expectations for future studies, not in an effort to test an existing theory.¹ Relatedly, we are able to demonstrate the utility of incorporating both individual- and group-level insights to explain the behavior of a violent organization. We hope that future studies will use this as a basis for future tests of hypotheses. As a result, what follows is an examination of the data in two stages: first, we describe the data and basic empirical patterns.

¹ Scholars have long noted the place of inductive approaches and exploratory data analysis for developing research agendas (Titunik 2014; Blagden 2016). This approach has been applied previously in cases of civil conflict (Fearon 2004; Bellamy 2015). It has also been applied to studies of participation in violence (Viterba 2006; Bosi and Della Porta 2012).

We then subject the data to a more rigorous examination using regression analysis. Following this, we offer an explanation for the results revealed by the analysis. While we know that this is a single group in a relatively compact timeline, we hope that similar analyses of different groups in different time periods and locations will help build a more complete picture of the inner workings of a violent group and why individuals take on different roles within these organizations.

Though different from much of the research that is done in the field today, we feel that this approach will present interesting findings and advance our understanding of the actions of terrorist foreign fighters once they make the decision to join an organization such as ISIS. Moreover, our efforts to explain the empirical patterns in the data will allow future research efforts to test these data-driven ideas to see whether they withstand the scrutiny of new data, new groups, and new eras.

Choosing a Role in ISIS

Beginning in 2011, a number of militant organizations used the Syrian civil war to call for individuals from around the world to come to Syria and fight. One of these groups, known as ISIS, emerged as the leading destination for many of these fighters as the war progressed. This phenomenon was well covered by the press, but was initially based more on anecdotal accounts and aggregated government estimates than a detailed examination of who was going. More recently, it has become possible to investigate variation in foreign fighter role selection more systematically than in the past, thanks to a dataset built from a trove of personnel files of just over 4,000 ISIS foreign fighters. NBC News and other media organizations obtained these files from an individual who identified himself as an ISIS defector who had access to a flash drive on which the records were stored (Engel, Plesser, and Omar 2016). NBC News approached the Combating Terrorism Center at West Point for assistance in analyzing and coding the data (Dodwell, Milton, and Rassler 2016b). Although these data are described in detail in a report published by the Combating Terrorism Center at the United States Military Academy, we discuss the data in some detail here.

The forms that gave rise to the dataset of foreign fighters can be best conceptualized as in-processing forms that were created as each fighter entered territory controlled by ISIS after crossing over the Turkey–Syria border.² After fighters crossed into ISIS territory, they were taken to safe houses where they filled out the in-processing form.³ Each form contains twenty-three separate fields of information, including names, dates of birth, and other demographic information. Some of the fields, including those that touched on the fighter's date and location of death, were almost always left blank. Nevertheless, despite the fact that some columns were not completed, a large majority of the forms contained sufficient coverage on the variables of interest for our analysis.

Information on recruit preference for suicide operations comes from a field that offers recruits three roles to choose from: fighter, suicide bomber, or suicide fighter (*inghimasi*). In the role of suicide bomber, either the individual might be fitted with a suicide belt or vest, or they may end up driving a vehicle packed with explosive material. The mission is clear: the *suicide bomber* is to walk or drive to the target, detonate their explosives, and potentially be video recorded for propaganda purposes. A *suicide fighter*, in contrast, most likely attacks on foot or as part of a group of soldiers with no intent to return. This may be not only because the individual is going to fight until dead, but also because they tend to wear suicide vests or belts to be

² Although it is possible that foreign fighters entered ISIS territory from Iraq, Jordan, or some other route, the entry points noted on the forms in this dataset are exclusively from the border crossing points near the Turkey–Syria border.

³ An image of one of these in-processing forms is available in the supplementary files for this article.

detonated after they have fought as much as they could with automatic weapons.⁴ Based on this information, we define *Suicide Role* as a binary variable that indicates whether or not the form indicated some type of suicide role or not, regardless of whether it was as a suicide fighter or a suicide bomber. This coding results in some loss of information and creates some ambiguities, as a small number of fighters selected into multiple roles, or, in some cases, none of the three roles. Still, this remains the most parsimonious method of investigating variation in fighter's suicide preference.

One possible weakness in our data is that an individual's preference for an organizational role is not actually the result of their own agency, but rather was directed in some form by the organization, or, at the very least, by the individual with whom the entering foreign fighter interacted in the course of filling out the form. While we cannot be completely confident that the process of filling out forms lacked any coercion, there are at least three reasons to believe the likelihood is minimal.

First, some of the border entry points were processing multiple fighters per day from widely varying locations and in numerous languages. It seems unlikely that each entry station had the requisite language expertise or the disposable time to be able to engage in substantive dialogue with every one of the fighters who came through their border crossing location in an effort to ascertain where they would best fit in the organization. The more likely possibility is that the information was entered as given by the entering individual. This is corroborated by an interview Rukmini Callimachi did with a Canadian who joined ISIS via Turkey she called Abu Huzayfah. In the podcast, *The Caliphate*, Callimachi discusses with Abu Huzayfah his intake into the organization in 2014:

Interviewer: *And they had you fill out forms?*

Huzayfah: *Yes.*

Callimachi: *The things that Huzayfah describes? I've seen these forms. I've held them in my own hands.*⁵

Huzayfah: *The form was like any regular form—your name, age, what level of education you have. Where did you study? What countries have you ever traveled through and lived in? How you came to find out about them. Why are you here? Have you ever fought before? Who referred you?*

...

Callimachi: *And then—*

Huzayfah: *And then they asked me what role I wanted to play.*⁶

According to Huzayfah, he was assigned the role, religious police officer, that he requested.

Second, we are not arguing that the organizational preference expressed by the entering individual and recorded on the form best represents the ultimate placement of that individual in the organization. Indeed, it seems likely that once an individual entered ISIS territory, went through training, and was ultimately assigned to a duty location, they could have easily been assigned to a different organizational role based on local conditions, the personality of their commander, or their own changed minds. By this point in time, they would have likely been in the

⁴For more discussion of the role of suicide fighters, see the US Army Foreign Military Studies Office's note on the term, available at http://fmso.leavenworth.army.mil/OEWatch/201506/MiddleEast_08.html.

⁵In our conversations with Rukmini Callimachi, she reports that there are multiple versions of the form. This was further confirmed in recent research that showed the existence of difference types of ISIS's personnel forms (Milton et al. 2019).

⁶This is from an interview in Chapter 3 of the podcast. The full transcription for each episode is available. <https://www.nytimes.com/2018/09/20/podcasts/caliphate-transcript-chapter-three-the-arrival.html>

organization for a number of weeks (if not months), giving both themselves and the organization much more information about what role they were best suited to fill. On the other hand, having sufficient information to coerce or guide a recruit into a particular role at the very border crossing point on the very day that the individual decided to cross seems less likely. In other words, regardless of what happened later in a fighter's experience and assignment, we think there is a good reason to believe that these forms are the best representation of their initial intention upon entering ISIS territory. Again, in Abu Huzayfah's self-reported experience, he was initially assigned his preferred role, but his superiors wanted him to eventually take on a different role:

Huzayfah: *It was a Libyan guy. He was a pretty big commander, and he's like, so, you—he asked me what you wanted to do with ISIS and everything. He's like, "You can't be police for a long time. Come on, you're a muhajir. You immigrated to these lands." And, like, I know. I wanted to be a front-line fighter.*⁷

According to Huzayfah, given his English language skills, the organization eventually wanted him to be part of a special group planning and executing attacks in the West.

Finally, the original raw data that contained the information we use in our analysis contained multiple forms for some of the individuals (Dodwell, Milton, and Rassler 2016b, 3). From what we understand about the process, individuals may have been asked multiple times at different stages of the process to fill out these forms. Only a few minor differences existed from one version of the form to the next. While it is possible that the organization managed information sufficiently well to reduce the occurrence of errors, a more likely explanation is that the lack of variance between the forms is due to the fact that the same individual filled out the form each time.

One other potential concern is that the types of fighters found on these forms may represent a different sample from the rest of ISIS's foreign fighting population. If this were the case, our results would speak less to the group than to a specific subsample. While this is certainly possible, within these files are holders of advanced degrees, doctors, engineers, business owners, religious scholars, and individuals who are well traveled. Although we agree that our lack of insight into the larger population requires caution, the sheer diversity among the individuals in these files would suggest they were not just the expendable or unimportant part of the group.

Fighter Origin and Volunteering for a Suicide Role

Our inspection of these data reveals two interesting patterns. First, the proportion of foreign fighters volunteering for suicide roles has declined compared with past iterations of the Islamic State insurgency. In this more recent cohort, only 11.4 percent of Islamic State recruits expressed a preference for a suicide role. By comparison, data on the Islamic State fighters in 2006–2007 indicated that fully 56 percent of foreign recruits were willing to conduct suicide attacks (Felter and Fishman 2007, 18; Dodwell, Milton, and Rassler 2016a, b).

Second, rates of suicide participation associate strongly with fighters' geographical origins. Those most likely to volunteer for a suicide role (which we refer to as "suicide volunteering") join ISIS after having lived in a non-Western country that is not currently undergoing a civil war. Following this group are individuals from non-Western countries undergoing civil war. Finally, the lowest rate of suicide volunteering occurs among Western recruits. This pattern is evident both in a descriptive examination of the data and in a multivariate modeling of the predictors of ISIS suicide bombing. Before further detailing this pattern, we first provide our

⁷ This is from Chapter 4 of the podcast. See <https://www.nytimes.com/2018/09/20/podcasts/caliphate-transcript-chapter-four-us-versus-them.html>.

definitions of these location categories. We then show how they relate to rates of suicide volunteering.

Western recruits

We define a recruit as *Western* if their country of residence was in Western Europe, North America, Australia, or New Zealand.⁸ Based on this definition, we coded 375 fighters coded as Westerners in our data, with France (124), Germany (75), and the UK (55) the top three Western countries of origin in our data.⁹ This category represents recruits from seventeen separate countries. It is striking how few recruits from these countries volunteer for suicide roles when compared to others. Only 19 of the 351 (5.4 percent) in this category volunteered to become suicide operatives.¹⁰

Countries in civil war

We also consider whether there was an ongoing civil war in an individual's home country in the year that they left to fight for ISIS. These data come from the PRIO Armed Conflict Dataset (Gleditsch et al. 2002). We code a recruit as coming from a *non-Western country in civil war* if their country of origin lies outside of the set of Western countries defined above, and the country is experiencing a civil war, as defined by PRIO.¹¹ There are 653 recruits in this category, with Russia (185), Azerbaijan (115), and Egypt (88) the top three countries. This category represents recruits from nineteen separate countries. In this category, 50 of the 604 recruits (8 percent) volunteered for a suicide role, a higher rate than those from Western countries, but still lower than those from the final category—those from non-Western countries that are not involved in a civil war.

Other non-Western countries

The remaining category denotes recruits who come from countries that are outside the West, and that are not currently experiencing civil war. The *other non-Western* designation applies to 2,925 individuals in this dataset. The top countries in this category are Saudi Arabia (770), Tunisia (630), and Morocco (254). This category covers the broadest set of locations, numbering forty-six separate countries. Three hundred sixty-four of 2,823 recruits in this category (12.9 percent) volunteered for a suicide role, the highest proportion in our data. Still, it is worth recognizing that this volunteer rate is still very low compared with that of previous jihadist mobilizations in the Levant. The breakdown of fighters in the dataset, including whether we coded them as *Western* and whether their home country was in a state of civil war when they joined ISIS, can be seen in table 1.¹²

⁸With this coding, we follow prior precedent in terrorism studies (Hegghammer 2013; Hegghammer and Nesser 2015).

⁹There are a small number of individuals in the dataset who list two countries of residence in such a way where one is a Western country and the other is a non-Western country (eight in total). As long as one of the countries of residence was a Western country, we coded the individual as being from a Western country. There are also a few individuals who list a citizenship, but not a country of residence. In these cases, we used the citizenship to construct the Western and civil war variables. There were fifty-six individuals in the dataset who did not list either a country of residence or a citizenship.

¹⁰The number of total observations in this calculation (345) is less than the total number of Westerners (367) because some individuals did not clearly indicate whether they wanted to be a fighter or in a suicide role on the form, while others left it blank. This issue also results in the slight difference between the total number of fighters and the number for whom their operational role is coded in the subsequent paragraphs and in table 1.

¹¹There may be some concern that the use of PRIO's definition for what constitutes a civil conflict is too low, leading to the inclusion of countries such as Russia, which was not necessarily engaged in a full-scale civil war. We believe that the lower threshold is actually important here, as the areas from which many ISIS recruits were leaving in countries such as Russia (Chechnya and Dagestan, for example) tend to have been engaged in some level of conflict with their governments for a number of years, regardless of what was happening in the rest of the country.

¹²If the civil war box states "Partial," this means that PRIO indicated that some countries were not in a state of civil conflict when some fighters joined ISIS, while for others who joined at a different time a civil war had started.

Table 1. Number of ISIS fighters in dataset

Country of residence	Number of fighters	Western	Civil war	Country of residence	Number of fighters	Western	Civil war
Afghanistan	4	No	Yes	Macedonia	16	No	No
Albania	13	No	No	Malaysia	5	No	Partial
Algeria	29	No	Partial	Mauritania	1	No	No
Australia	11	Yes	No	Moldova	1	No	No
Austria	3	Yes	No	Morocco	254	No	No
Azerbaijan	121	No	Partial	The Netherlands	11	Yes	No
Bahrain	25	No	No	Norway	2	Yes	No
Belgium	24	Yes	No	Oman	2	No	No
Bosnia and Herzegovina	5	No	No	Pakistan	12	No	Partial
Bulgaria	1	No	No	Palestine	19	No	Partial
Cameroon	1	No	Yes	Poland	1	No	No
Canada	17	Yes	No	Qatar	10	No	No
China	156	No	No	Russia	205	No	Partial
Denmark	13	Yes	No	Saudi Arabia	770	No	No
Egypt	182	No	Partial	Serbia	2	No	No
Finland	5	Yes	No	South Africa	3	No	No
France	122	Yes	No	Spain	10	Yes	No
Georgia	5	No	No	Sudan	7	No	Yes
Germany	72	Yes	No	Sweden	13	Yes	No
India	7	No	Partial	Switzerland	2	Yes	No
Indonesia	73	No	No	Syria	111	No	Partial
Iran	17	No	No	Tajikistan	63	No	No
Iraq	36	No	Partial	Tanzania	2	No	No
Ireland	1	Yes	No	Trinidad and Tobago	2	No	No
Israel	4	No	Partial	Tunisia	630	No	No
Italy	1	Yes	No	Turkey	216	No	Partial
Jordan	57	No	No	Turkistan	1	No	No
Kazakhstan	35	No	No	Turkmenistan	7	No	No
Kenya	2	No	Yes	Ukraine	4	No	Yes
Kosovo	45	No	No	United Arab Emirates	6	No	No
Kuwait	24	No	No	UK	52	Yes	No
Kyrgyzstan	63	No	No	Uzbekistan	58	No	No
Lebanon	32	No	Partial	Western Sahara	1	No	No
Libya	94	No	Partial	Yemen	22	No	Partial

Location of origin and suicide volunteering

Taken together, the above inspection indicates that not only is suicide volunteering rare in this cohort, it is also associated with fighters' location of origin. A bivariate test of this relationship shows that this association is very unlikely to be a mere artifact of chance. We perform a chi-square test of the association between location of origin and suicide volunteering and find that the relationship is highly significant ($p < 0.001$) (reported in [table 2](#)).

A Multivariate Analysis

Beyond this descriptive and bivariate relationship, this pattern is also evident when modeling the rate of suicide bombing volunteering with a set of several control variables that, based on previous academic research, might be expected to predict suicide bombing and may be related to country of origin. To predict an

Table 2. ISIS foreign fighters by role and location of origin

	Fighter	Suicide role	Total
Western	332 (94.5%)	19 (5.4%)	351 (100%)
Non-Western and civil war	564 (92%)	50 (8%)	614 (100%)
Non-Western and non-civil war	2,451 (87.1%)	362 (12.9%)	2,813 (100%)
Total	3,347 (88.5%)	431 (11.5%)	3,778 (100%)

Pearson $\chi^2 = 25.81$; $p = .000$.

individual foreign fighters' probability of volunteering to become a suicide bomber, we use a logit model with fighters' location of origin alongside a set of other covariates. Below we consider alternative explanations for the variation in fighter's suicide preference and then briefly define each variable used in the subsequent empirical analysis. These three explanations are biographic availability, opportunity cost, and religious knowledge. A more complete discussion of the coding of each of these variables appears in the online appendix.

Biographical availability

The willingness of individuals without personal and family constraints to engage in higher risk activities is known as biographical availability (McAdam 1990). Some studies have suggested that this factor influences participation in risky social movement activity, including violent militancy, though findings are mixed (Wiltfang and McAdam 1991; Schussman and Soule 2005; Perlinger, Koehler-Derrick, and Pedahzur 2016). We operationalize this possible influencer with an indicator of whether a recruit is married, as well as with an indicator of whether a recruit has children. Because biographic availability can also become lessened as one acquires a variety of personal commitments that may not be captured through marital status or whether someone has children, we also include a variable of the recruit's reported age.

Opportunity cost

Research on civil war has found that the material prospects that individuals leave behind to join a rebellion—that is, the opportunity cost of fighting—influence participation (Collier and Hoeffler 2004). For foreign fighters, however, several studies have concluded that opportunity cost is far less important (Hewitt and Kelley-Moore 2009; Benmelech and Klor 2018). Still, it is possible that even if opportunity cost does not influence the decision to become a foreign fighter, it still matters when one considers whether to participate in a suicide role. To account for this possibility, we include several variables to operationalize opportunity cost. First, we include an indicator of whether a recruit has a post-high school education, since more educated recruits generally can expect to enjoy more attractive career prospects. Second, we include an indicator of whether a recruit was employed before they traveled to join ISIS. Such recruits, on average, can be expected to leave behind more material benefits. And finally, we include the unemployment rate of the fighter's home country, to proxy the employment prospects that a fighter leaves behind.

Religious knowledge

Lastly, a recruit's knowledge of Islamic doctrine might have an influence on his proclivity for a suicide role, although the direction of this relationship is not obvious. Some have argued that deep religious immersion instills a worldview that promotes more radical, violent action (Juergensmeyer 2000). This assertion is compatible with a positive relationship between religious knowledge and suicide volunteering. On the other hand, reporting on ISIS suggests that clerical knowledge is an in-demand

Table 3. Summary statistics

Variable	<i>n</i>	Mean	Standard deviation	Minimum	Maximum	Percentage of missing observations
Suicide role	3,806	0.11	0.32	0	1	5.1%
Non-Western and civil war	3,953	0.16	0.37	0	1	1.4%
Non-Western and non-civil war	3,953	0.74	0.44	0	1	1.4%
Age	3,913	26.49	96	18	69	2.4%
Married	3,677	0.33	0.47	0	1	8.3%
Children	4,009	0.22	0.42	0	1	0%
Post-high school education	3,299	0.31	0.46	0	1	17.7%
Advanced Sharia knowledge	3,944	0.04	0.20	0	1	1.6%
Employed	3,594	0.93	0.25	0	1	10.4%

skill for the organization, particularly as it sought to base its governance model on the backbone of religious legitimacy (Bloom 2017). Given the importance of the governing project to the group's long-term stability, we find this latter argument to be more convincing. If the skill is in demand, those with specialized clerical knowledge might be discouraged from taking on suicide attacks. To account for possibility of such a relationship, we include an indicator of whether a recruit declared that they have above average knowledge of Sharia.

Table 3 contains the summary statistics for all the variables discussed above.

Exploratory Regression Analysis Results

Now, we turn to a discussion of the results of our exploratory regression analysis. As indicated in table 2, even after controlling for these additional factors, we observe a strong association between a fighter's location of origin, the presence of civil war in a fighter's country of origin, and suicide volunteering.

In addition to our main model (reported in table 4), we estimated a number of additional models to see if this pattern persisted. In one additional model, we added three predictors that indicate whether a fighter reported having prior jihad experience, was an immigrant, or entered the battlefield in 2014. The result is largely similar. We also estimated models excluding any fighters in the data from Iraq and Syria, adding GDP, and adding a dummy variable for democracy. With some minor changes in the levels of statistical significance, the takeaway from our results here is unchanged. We also estimate a model in which we combine the age, married, and children variables into a single factor (biographical availability). While this factor is significant and is associated with suicide role in the expected direction, the overall predictive power of the model declines with this specification. In another model, we used a three-part dependent variable and estimated a multinomial logit to predict suicide bombers, suicide attackers, and fighters as separate categories. Results for our core claim were supported though some of the control variables had a different effect within these categories. Finally, missing data are an issue in the main models. To evaluate whether this influences our inferences, we create an imputed data, generated with a chained imputation procedure (Royston 2004). In brief, we create five imputed datasets each with complete cases across our key variables. Replicating the main model with this imputed data does not alter the basic results, giving us confidence that missing data are not influencing our findings.¹³

¹³These full results of all estimations are reported in the supplementary files of this article.

Table 4. Predicting foreign fighter suicide roles

	Suicide role
Non-Western and civil war	0.584* (0.336)
Non-Western and non-civil war	0.936*** (0.295)
Age	0.0002 (0.012)
Married	-0.395* (0.221)
Children	0.080 (0.247)
Post-high school education	0.023 (0.134)
Advanced Sharia knowledge	-0.045 (0.141)
Employed	0.032 (0.240)
Unemployment rate	0.008 (0.014)
Constant	-2.791*** (0.454)

Number of observations is 2,516. Standard errors in parentheses.

*** $p < .01$, * $p < .1$.

All told, both the rareness and variation in volunteering for suicide bombing represent an intriguing empirical regularity awaiting explanation. In the next section, we draw on recent scholarship on ISIS propaganda to fashion a possible explanation for this pattern.

Explaining the Pattern

The low rate of suicide volunteering featured in this cohort of ISIS fighters is interesting, particularly in view of the tactical advantages of such operations and the higher level of publicity that the media generally affords to them. Moreover, based on our data, it seems that individual characteristics alone are insufficient to fully explain the preferences being expressed by these individuals when they join ISIS. Indeed, the only strictly individual-level variable that is statistically significant is an incoming fighter's marital status. The factor that seems to matter the most in the role that a newcomer expresses a preference for is where they are coming from. But why? To explain this, we turn to an examination of the group's role in this process.

To begin to explore the group's influence on the individual's decision to opt for suicide roles, we believe that comparing the context of the group's first recruitment wave of foreign fighters from 2006–2007 to its latter efforts during 2012–2014 will be instructive. In Iraq, the Sunni Islamist insurgency began to ebb as early as 2005, as fissures with local Sunnis in Anbar came out into the open (Fishman 2009). Within a year, a groundswell of local Sunni resistance—dubbed the Anbar Awakening—was in full swing, exacting a devastating toll on ISIS's predecessor, Al-Qaeda in Iraq (AQI). By its leaders' own admission, the movement during these years was in a state of "extraordinary crisis," with many of its fighting units decimated by the combined efforts of coalition forces and local tribal units (Phillips 2009, 65). For those joining the insurgency in Iraq during these years, fighting for AQI could offer martyrdom, but little else.

AQI was also languishing as a political institution during those years. In October 2006, AQI announced the formation of an Islamic State, but its bluster failed to convince the outside world, not least many within the community of global jihadists (Felter and Fishman 2007, 5). Before 2013, the Islamic State had only tenuous control over territory in Iraq. In places like Mosul, it went underground (Knights 2008; Lister 2016, 231). This fell far short of the Islamic State boasted of by its leaders. From the very start, its detractors derided it as an “imaginary” state that existed only online (Bunzel 2015, 20; McCants 2015, 15–19). And dispelling this perception was difficult, given the hostile political and strategic climate during these years. According to testimony given to Iraqi police, even the wife of Islamic State commander, Abu Hamza al-Muhajir, once needled her husband about the poor condition of the Islamic State. “Where is the Islamic State of Iraq that you’re talking about?” She reportedly complained, “We’re living in the desert” (Bunzel 2015, 22). As this anecdote illustrates, the Islamic State during those years failed to convincingly advertise itself as a place to begin a new life in a society governed according to Islamist precepts.

Considering that during these years the Islamic State could offer little in the way of battlefield glory or socioeconomic spoils, it is perhaps not surprising that the group attracted smaller numbers of foreign recruits than it would in 2013–2014, and that a higher proportion of these recruits came with the expressed intent of attaining martyrdom right away.¹⁴ In 2007, estimates of foreign fighters in Iraq ranged between 1,000 and 4,000, with estimates in the vicinity of 2,000 more common.¹⁵ A dataset of AQI foreign recruits that the US military captured in October 2007 suggests that as many as 56 percent of AQI recruits during these years joined the organization to become suicide bombers (Felter and Fishman 2007, 3, 18). Compare this figure to recent estimates of ISIS foreign fighters that reach as high as 40,000 (Sanderson 2017). The data presented in this article suggest that only 11.4 percent of recruits who joined ISIS in 2013–2014 arrived wishing to immediately become a suicide bomber.

The 2013–2014 surge in foreign fighter recruitment came against a backdrop of the apparent ascendancy of ISIS. In 2014, ISIS won a string of victories in Syria and Iraq, and in June 2014, it declared a new Caliphate to burnish its state-building momentum. We argue that these advances allowed ISIS recruiters and sympathizers to frame participation in the insurgency in ways that would not have been compelling in the past.¹⁶ These new appeals can be separated into two categories. First, the promise of *status reversal* is strongly intimated in many ISIS portrayals of life in the Caliphate. It was suggested to foreign fighters that their role in the Caliphate would be one of high status and prestige. This includes privileged access to positions of authority as well as material and sexual benefits. We surmise that this selling point should have special resonance for those living in the West—especially Europe—where ISIS recruits come largely from socially marginalized Muslim communities (Perliger and Milton 2016). This promise of status reversal dovetails with the desire expressed by many Western recruits to live a more meaningful and fulfilling life. Second, ISIS advertised the Levant as a *jihadist destination*, showcasing its large, well-equipped units, and its ultraviolent operations to tantalize those who wish to experience the thrills of battle and the spoils of victory. We argue that this trope was especially potent for those who already viewed themselves as aspiring

¹⁴ See the supplementary files for a discussion of foreign fighter recruitment framings and their resonance during this period.

¹⁵ Byman and Pollack (2008) report military sources that estimate the number of foreign fighters in Iraq in 2007 at between 1,000 and 2,000 (57). Obaid and Cordesman (2005) report US sources as estimating the figure at about 1,000 in 2005, while Saudi sources estimated that 3,000 fighters were active. Hafez (2009) offers a back-of-the-envelope estimate of foreign fighters during that period as ranging between 2,300 and 4,000 (86).

¹⁶ A number of studies have shown that the scale and reach of ISIS propaganda surpassed previous iterations of the group (Farwell 2014; Milton 2016; Whiteside 2016).

professional jihadists and were looking for the best venue to pursue this path.¹⁷ We suggest that individuals living in the midst of civil wars were more likely than others to cast themselves in this role. Taken together, these two themes help explain why those who travel from the West or from countries embroiled in civil war are less likely to volunteer for suicide roles than those whose backgrounds include neither of these features. After all, ISIS propaganda also consistently emphasizes the duty of Muslims to serve their threatened co-religionists in the Levant. We argue that since the two positive themes enumerated above would have had less purchase for those outside the West or countries in civil war, the latter negative theme—predicated on self-sacrifice—remained as a more resonant motivating theme for these recruits. Hence, those from this category were at the highest risk of suicide volunteering.

Status Reversal and Western Recruits

The interrelated appeals of living a truly Muslim life and assuming a position of dominance over other groups on society's status hierarchy might have held a particular allure for ISIS recruits who traveled from Europe, where ideological notions of Western society as alienating and marginalizing had a direct compliment in their lived experiences (Dalggaard-Nielsen 2010).

By presenting the Caliphate as the antithesis of life in Europe, ISIS offered a chance to begin life anew (Gambhir 2014). "Living amongst the sinful kills the heart, never mind living amongst the kuffar!" Dabiq—the premier vehicle for ISIS propaganda directed at Western audiences—remarked. Life in the West will "destroy the person's *fitrah* (character) to the point of no return, so his heart's doubts and desires entrap him fully" (Barton 2019, 152). Depression and status anxiety, sentiments felt by many people whatever their circumstances, were given a clear diagnosis for Muslims living in the West. "I know how you feel," a British ISIS militant commiserated with his audience in a June 2014 ISIS propaganda video: "in your heart you feel depressed." Since Western society is the cause of this listlessness, "The cure for the depression is jihad for the sake of Allah" (Lister 2016, 236).

Anecdotes gathered by scholars and analysts suggest that this pitch was highly effective, not least among those living in Europe. In a 2014 study of ISIS recruits, Richard Barrett noted that while some Westerners expressed eagerness for martyrdom, many others joined for a chance at remaking their life in a place where purpose and meaning would be provided by religious authorities, and where a structured environment would lend reprieve from an unstable home life, problems with substance abuse, or similar so-called afflictions of European modernity (Barrett 2014). Weggemans, Bakker, and Grol (2014), too, observed such characteristics in their interviews with Dutch foreign fighters and local police and security professionals. While they caution that no single radicalization pathway captures the diverse and complex processes that led their interviewees to the conflict, they note a broad tendency, wherein a growing interest in religious ideas and an immersion in radical Islamist social circles coincides with periods of turbulence in an individual's personal life. Other research has also seen this play out through the ability of the group to appeal to those with troubled backgrounds in other Western countries as well (Gates and Podder 2015; Bakker and de Bont 2016; Perliger and Milton 2016).

ISIS also directly addressed its Western audience with the tempting prospect of climbing suddenly to the top of society's pyramid. "The modern-day slavery of employment, work hours, wages, etc., is one that leaves the Muslim in a constant feeling of subjugation to a *kafir* master," Dabiq remarked in 2014. For this reason, the Muslim in Europe "does not live the might and honor that every Muslim should live and experience" (Ingram 2017, 368). For many of those who traveled from Europe

¹⁷ See the supplementary files for a discussion of the empirical literature on ISIS propaganda that informs this thematic typology.

to join ISIS, this message appears to have held a convincing appeal. Summarizing their interviews with foreign ISIS recruits in Europe, Dawson, Amarasingam, and Bain (2016) remark that even minor experiences of discrimination in European society left stinging memories, creating a backdrop that put the new Caliphate into a more favorable relief. Discussing findings from a quantitative study of ISIS foreign fighter flows, Benmelech and Klor (2018) similarly argue that difficulty assimilating into European society is an important force behind European ISIS recruitment.

By redrawing the social hierarchy, ISIS promised its European recruits a new start in a place where true Muslims, finally, would constitute the dominant class (Ingram 2014, 6). And even better, foreigners and especially Westerners would be lavished with special privileges upon joining. Testimony from current and former ISIS members reveals a widespread perception that Western foreign recruits received preferential access to material privileges—such as houses and cars—upon their arrival in the Caliphate (Neumann 2015, 10; Speckhard and Yayla 2015, 108; Byman 2016, 151). Of course, settling in the Caliphate came with many dangers, and a high chance of eventual violent death. Still, a chance to live out this fantasy for a short time might nonetheless have seemed irresistible—particularly for Western recruits looking to escape the weight of perceived subordination and marginalization in their home country.

A Jihadist Destination and Countries in Civil War

Many of those who traveled from war-torn countries to join ISIS left behind a conflict at home that pits Sunni Muslims against a hostile government. Jihadi framings of these conflicts equate the war at home and the war in Iraq–Syria as part of the same global collision between Islam and its enemies. Fighting at home and abroad, then, held similar legitimacy. Analysts have noticed, for instance, that many ISIS arrivals from Libya traveled from Derna, a source of jihadist fighters since the 1980s (Soufan Group 2015, 12). Likewise, many of the Russians who traveled to Syria are from the North Caucasus, and speak of Syria as another location for combating the enemies of Islam, just as they have done in their wars at home against the Russians, “the quintessential ‘infidel’” (Souleimanov 2014, 155).

While some of these foreign fighters arrived in Iraq and Syria with considerable fighting experience already under their belts, many more traveled from these countries without extensive experience in their local insurgency.¹⁸ There are indications that a portion of those who traveled from their home conflicts to join the fight in Iraq and Syria did so as a way to acquire battlefield experience in a “famous” conflict. To wit, there is speculation that in Morsi’s Egypt (prior to July 2013) and in Putin’s Russia, authorities were quietly supportive of local insurgents taking their zeal abroad (Awad and Hashem 2015, 21; Borschevskaya 2017, 10; Olikier 2017).

The fortuitous circumstances of jihad in Syria–Iraq were clearly apparent in 2013–2014. In Russia, viral videos and images of jihadists from the North Caucasus overrunning Syrian military bases appeared on social and traditional media in the summer of 2014. Reacting to the public controversy, Russian politicians and security officials felt compelled to give public statements on the videos (Vatchagaev 2014). Luxuriating in this contrast, ISIS sympathizers on social media once even mocked the jihadists in the North Caucasus for “eating leaves in the parochial backwaters of Dagestan,” while ISIS fought “a five star jihad” (International Crisis Group 2016, 6).

Another example of this logic can be found in Egypt. So long as the Brotherhood-supported Mohammad Morsi was in power, fighting the Alawite regime in Syria may have seemed more appropriate than battling the Egyptian government at home.

¹⁸ Our data are consistent with other reports that suggest most ISIS foreign fighters, including those from countries with ongoing civil wars, arrive in Syria lacking prior battlefield experience (Byman and Shapiro 2014; Cotichia 2016; International Crisis Group 2016). In our data, only 114 of the 562 (20.3 percent) fighters from civil war countries claimed to have prior battlefield experience upon joining ISIS.

With the military takeover of Abdel Fattah al-Sisi and subsequent crackdown on both Brotherhood-sponsored and Salafist activities in Egypt, many local Egyptian jihadis responded by redoubling their insurgency in the Sinai Peninsula and seeking to foment, without much success, a campaign of terrorism in major cities (Gold 2016; Awad and Hashem 2015). Yet as the prospects for reversing al-Sisi's takeover dimmed, it appears that some local Egyptian jihadists saw greater promise for their violent careers in Syria. In the months following ISIS conquest of Mosul, Egyptians on social media gained attention with boasts of their martial accomplishments and gory visuals of ultra-violence (Marcellino et al. 2017). In short, the prospect of experiencing the exhilaration of dramatic battles and ultra-violent encounters seems to have tempted some away from their more humdrum jihads at home.

Adding to this appeal, those who survived could expect enhanced jihadi cachet that would allow them to play a more prestigious role in their local insurgencies. According to Egyptian analyst Eric Trager, an Arabic news site, *Ida'at*, identified numerous Egyptian ISIS fighters traveling to Syria to gain battlefield knowledge, which they intended to later put to use against al-Sisi (Trager 2016). Tellingly, analysts have commented that a sizable portion of fighters from war zones joined up with insurgents from their home country, or arrived in Syria with the intention of pledging loyalty to a particular "celebrity" commander from their home country (Souleimanov 2014, 156–57; Tucker 2016). Inasmuch as these sensory and process incentives influenced perceptions of ISIS participation, they would have discouraged volunteering for a hasty demise as a suicide bomber.

Duty and Defense

Invoking religious duty as a rationale for ISIS membership is a commonplace in the testimonies of ISIS foreign fighters, irrespective of their origins. This is not surprising, given the long-standing importance of this script for explaining and justifying taking arms. But just how strongly did this appeal resonate, compared to other attractions of ISIS membership—including the two broad themes of status reversal and jihadi destination that we have highlighted? We cannot pretend to offer a definitive answer to this question, beyond suggesting that status reversal and military glory spoke somewhat less directly to the immediate circumstances of audiences in non-Western countries without active Islamist insurgencies—making it seem plausible that the duty and defense narrative may have held greater proportional weight within this population.

At the very least, the narrative of duty and defense seems to have acted as a potent mobilizer in these countries. For example, the sudden spike in Saudi volunteering in Syria, which occurred in May 2013, followed revelations of the entry of Lebanon's Hezbollah into the war. Against this act of Shia encroachment, prominent Saudi clerics began to inveigh upon their followers to rise against Assad and his backers, in what Aaron Zelin described as a pointedly sectarian appeal (Zelin 2014, 11). Likewise, summarizing ISIS recruitment in Jordan, Anne Speckhard notes that a powerful catalyst for fighters was their emotional response to visual images of Assad's atrocities against Sunni co-religionists. She cites a local study of sixty-two Jordanian fighters claiming that many within this cohort had been groomed over a period of two months of online and personal interactions with recruiters and "dreamt about martyrdom" before making their ultimate decision to enlist (Speckhard 2017, 31). Another study, which distills salient themes from a number of televised interviews with ISIS fighters, observes that Arab fighters from nearby countries were often inclined to explain their enlistment in terms of their identity as "Muslims who have to act accordingly" (Quantum Communications 2015, 13).

These examples do not amount to systematic evidence that the duty and defense narrative dominated the perceptions of fighters from these categories, but these and other such anecdotes provide ample indication that this frame was widely in

currency for these audiences. Of course, the same framings of duty and defense also appear in the recruitment narratives and testimonies of ISIS recruits from the West and from countries undergoing civil war. We interpret the higher proportion of suicide volunteering within this third cohort, however, as indicative of the possibility that the duty and defense framing may have occupied a greater position in the range of factors shaping perceptions of foreign fighting and the role expectations thereof.

In sum, inspecting the data on Sunni foreign fighter recruitment to the Levant between 2013 and 2014 has revealed two interesting facets of the mobilization that occurred during these years. First, when ISIS appeared militarily and politically ascendant, it began to draw large numbers of foreign recruits who were disinterested in performing suicide attacks, at least in the near term. Second, those who joined ISIS from Western countries and countries with ongoing conflicts during these years were especially disinclined to become immediate suicide bombers. We argue that variation in sociopolitical conditions across countries caused ISIS recruiting messages to resonate differently for recruits depending on where they lived before they traveled to join ISIS. This variation is responsible for instilling foreign recruits with differing motivations and expectations for fighting the Levant. While we do not claim that this argument crisply encapsulates the motivations of every recruit, we suggest that it explains the aggregate patterns observed in the data.

Extrapolating this argument is suggestive concerning future waves of Sunni foreign fighters. According to the framing logic we have presented, so long as the Sunni insurgency in the Levant continues to face setbacks—resembling the lean years of 2005–2012—the framings of status reversal and professional jihad will have little purchase. We should therefore expect total flows of foreign fighters to remain low, and for these flows to come disproportionately from non-Western and non-civil war countries. Moreover, we should expect a higher proportion of these foreign fighters to volunteer for suicide roles. In short, the foreign fighter mobilization will fit the historical template, predicated on high commitment to the cause and an accompanying willingness to die. Conversely, in the event of another string of successes for the Sunni insurgency in the region, militants will once again be capable of advertising foreign fighting to a broader audience using material inducements, and this may enable another mobilization resembling that of 2013–2014.

Discussion

Taken together, we believe that using the individual-level data on the demographics of ISIS fighters and combining them with an examination at the organizational level of messaging themes designed to recruit individuals to the organization has offered a more comprehensive view of why individuals entering ISIS from 2012 to 2014 expressed a preference for certain organizational roles within the organization. In this specific case, neither approach alone was able to account for why certain fighters end up in suicide roles while others did not. The issue of how individual- and group-level factors, however, impact outcomes goes far beyond ISIS.

As Haidt (2012) details in his book about the foundations of human moral systems, Charles Darwin believed that natural selection occurred at the group *and* individual levels. Haidt argues that the development of shared morality, even moral systems that we find abhorrent, is an evolutionary adaptation. In short, groups that developed a shared moral system that discouraged defection thrived versus their less cohesive rivals. This explanation, albeit in a field seemingly very different from terrorism studies or political science, also demonstrates the interrelatedness of individual- and group-level explanations. In other words, although we have demonstrated the utility of this approach in the narrow case of ISIS's recruitment efforts of foreign fighters, there is likely a much broader application.

Haidt (2012) provides a much more recent example of how Darwin's ideas incorporating both individual- and group-level behaviors have been validated as we

look across all kinds of group behaviors from modern states to voluntary organizations. It may be that the onset and evolution of violent group behavior follows similar adaptive processes, requiring explanations that operate at least at these two levels. Such thinking has already been applied in some cases to decision making at the state level and with regard to conduct of government militias in civil war (Byman and Krebs 2010; Berkowitz 2018). We think that the continued combination of these approaches and willingness to examine how lower and upper level units influence outcomes—be they individuals, groups, organizations, states, or international institutions—is a promising field of inquiry for scholars. Our work here has illustrated a few points to keep in mind moving forward in this process.

First, in examining these questions, there may be an increased need for a mixed-methods and even a mixed-data approach. In our examination of the factors that influenced organizational roles of incoming ISIS fighters, the data consisted of a quantitative analysis of personnel forms and a qualitative analysis of themes present in ISIS propaganda. Such work that incorporates more than one methodological perspective is certainly on the rise when it comes to studies of militant organizations and movements, including prosecutions, propaganda analysis, and the discourse of radical religious figures (Nielsen 2017; Wignell et al. 2017; Norris and Grol-Prokopczyk 2018; O'Halloran et al. 2019). Beyond these studies, however, our contention would be that mixed-methods approaches should incorporate cross-level analysis as well.

Second, like in other areas of social science research, there is tension between approaches based on concerns about validity. One of the most pressing concerns about using mixed-level analysis, is the ecological fallacy, or the logical fallacy related to making causal inferences to individual behaviors based on group-level data (Robinson 1950; Seligson 2002). In this analysis, we tried to avoid making such a fallacy by using individual-level data to explain individual-level choices and group-level data to explain group choices. In the study of violent organizations in general, researchers should be cognizant of this challenge, and likely already have been exposed to this in other research domains across international studies.

Third, the ecological fallacy can lead to invalid inferences, but the problem has in some cases been misinterpreted and misused. As Schwartz (1994) argued in the context of public health research, dealing with this fallacy can be recast as an issue of internal validity. As Schwartz (1994, 819–20) notes:

As a result of the grouping operation, one may have controlled for the effects of other variables, making the ecological estimate less biased than the individual estimate, or one may have included various confounding variables, making the ecological-level correlation more biased. If a difference occurs between ecological- and individual-level correlations, the problem may be due to a failure to specify the correct model and not to an inherent logical fallacy in moving from individual to group correlations.

In more recent work in international studies, there is a push towards *properly* identified causal models (Samii 2016). While we are not arguing that all work in this area needs to be experimental or have a “proper” identification strategy, we see the value in both ways of dealing with ecological problems in mixing individual- and group-level inferences.

Conclusion

In this essay, we have suggested some ways to improve the study of violent organizations using information about individuals *and* groups. In our perspective, the combination of individual- and group-level perspectives will be useful in answering questions about the activities and execution of militant organizations of all stripes. We were able to do this by utilizing primary source evidence such as fighter registration forms and terrorist group propaganda to help conduct the analysis. Such

an approach is not novel and has been previously leveraged to provide valuable insights into the workings of these organizations (Shapiro and Siegel 2010, 2012; Shapiro 2013; Miranova 2019).

Relatedly, research on issues like radicalization and de-radicalization is and should continue attempting to integrate information across levels as focusing on one likely leads to potential biased inferences (Horgan 2008; Doosje et al. 2016). However, the melding of individual- and organizational-level perspectives using any type of information is challenging. The approach here, relying on primary source documents, though insightful, clearly contains potential pitfalls. In conclusion, we wish to discuss a few of these pitfalls both as a way of caveat our analysis and as an effort to help guide future studies that seek to utilize this type of information.

First, one challenge of using original documents from these organizations is whether we can trust them to be truthful and revealing. We know even people who hold radical beliefs do not always act on them (McCauley and Moskalenko 2017). Related, research experiments on why people support torture suggest that support does not perfectly relate to whether people are willing to act on these beliefs (Kearns and Young 2020). When someone answers a survey, even in a violent organization, we cannot be perfectly sure that they are being truthful or that these beliefs will lead to action. This is part of the reason that the context surrounding such materials needs to be discussed to the greatest extent possible. To that end, in this essay we attempted to provide as much information as we could about the nature of the forms used in the analysis.

Second, our analyses and discussion are heavily weighted toward current radical Islamic groups and individuals. With domestic threats in many countries in today's environment more prominently emanating from the far right, it is not clear whether similar information from a group such the Ku Klux Klan or the Russian Imperial Movement would be available or apply in the same ways. We expect that there are similarities in what we can learn across different types of violent organizations, but previous research has shown that context matters (Gill, Horgan, and Corner 2019b; Yon and Milton 2019). Where violent organizations do not hold territory or when they are less centralized in terms of their structure, it is likely a greater challenge to get formal documents like those utilized in this essay. Web scraping tools and other techniques to capture online discussions might be more useful in these cases (Holt, Freilich, and Chermak 2020; Scrivens, Davies, and Frank 2020). However, even in such cases involving different types of data, the consideration of individual and group perspectives is critical.

Finally, no single approach is perfect when trying to understand actions and organizations trying to remain clandestine (Shapiro 2013). Less was known about ISIS prior to their declaration of the Caliphate, which brought a vastly increased focus on the group by academics and policymakers. Studying these organizations will always be a challenge in real time as they do not want to be seen and known. However, it may be that more historical analyses of similar groups can shed light on current threats that remain shrouded in darkness, whether in the case of recruiting, technology usage, or how these groups end (Cronin 2006; Ressler 2016; Bloom 2017; Staniland 2017). Thus, although current groups will (and should) attract scholarly interest, there are still many questions that can be answered by looking at unique troves of material related to older groups.

In this analytical essay, we have advocated the combination of data and theory across both the individual and group levels. As discussed above, we recognize that the application of such an approach is not a one-size-fits-all solution. Indeed, there are numerous considerations and limitations to consider. Despite these hurdles, we believe that continued efforts to work across multiple levels of analysis hold promise for increasing our collective understanding of non-state actors such as terrorist organizations, as well other entities. Ultimately, our hope is that the discussion in this essay will lead to the continued development and production of even more impactful research.

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