Networks, Careers, and the Jihadi Radicalization of Muslim Clerics

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July 1, 2014

Abstract

Why do some Sunni Muslim clerics preach militant Jihad while most do not? I argue that cleric educational networks and career incentives influence whether clerics adopt Jihadi ideology. Well-connected clerics typically pursue comfortable careers within state-run religious institutions and they reject Jihadi ideology in exchange for continued material support from the state. Clerics with weak educational networks cannot rely on connections to advance through the state-run system, so many pursue careers outside the system by appealing directly to lay audiences for support, often using Jihadi ideology. I provide evidence of these dynamics by collecting and analyzing 27,124 fatwas, articles, and books by 101 contemporary clerics. Using statistical natural language processing, I measure the extent to which each cleric adopts Jihadi ideology in their writing. I combine this with biographical and network information about each cleric to trace the process by which well-connected clerics become less likely to adopt Jihadi ideology.

Word count: 11,013, all inclusive

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1 Introduction

Clerics[1] wield significant power within Sunni Islam. Referred to as "the *ulama*" (literally, "learned ones"), these individuals have an enormous effect on what Muslims believe and do. Historical debates among the *ulama* have determined which doctrines are considered acceptable or heretical in Islam. Contemporary pronouncements by clerics can have substantial sway among lay Muslims, defining norms for the entire range of human action. Clerics that support Jihadi ideology are of particular concern because these ideas can motivate violence (McCants, 2006; Nolan, 2013). The influence of Jihadi clerics is so great that extremist cleric Anwar al-Awlaki was called the "most dangerous man in the world" by a New York Police Department counterterror official in November 2010.[2]

Despite the vast literature on militant Jihad, scholars know very little about the causes of radicalization among the clerical elite.[3] Understanding cleric radicalization may illuminate how extremists can be persuaded to moderate their views or how new generations of radical clerics can be checked.

I argue that cleric educational networks shape the career opportunities available to clerics, pushing some to radicalize and others to remain moderate. Most clerics support themselves by holding paid positions as professors, preachers, bureaucrats, and advisors in the state-run system of mosques, universities, and ministries in their respective countries. Governments throughout the Muslim world strongly oppose Jihadi ideology and clerics in the state system adapt their views accordingly. However, poorly-networked clerics face limited options for advancement within state institutions so they seek careers outside the system by appealing directly to lay Muslims for support. To appeal to these constituencies, some clerics adopt Jihadi ideology as a costly, credible signal of their commitment to doctrinal integrity.

[1] No uncontested definition of a Muslim cleric exists. Clerics with positions in government religious bureaucracies sometimes decry independent clerics as illegitimate and vice versa. I define a "cleric" as a person who engages in Islamic religious production, including fatwas, Quranic exegesis, biographies, and treatises on religious subjects. My definition includes people like Usama bin Laden and Sayyid Qutb who lacked formal training, but who produced documents that they claimed were fatwas (bin Laden) and Quranic exegesis (Qutb).

[2] http://abcnews.go.com/Blotter/awlaki-dangerous-man-world/story?id=12109217, accessed 30 June, 2014.

[3] I use the term "radicalization" for the process by which an individual comes to produce and reproduce extreme ideas. Radical ideas do not necessarily translate into terrorist actions (Horgan, 2008, 83), and terrorists who have disengaged may not have deradicalized (Horgan, 2009; Horgan and Bjorgo, 2008, 27).

Of course, idiosyncratic personality features and life experiences play a role in a cleric's turn to Jihadism, and most clerics themselves would probably attribute their choices about ideology to personal conviction. Nevertheless, I find substantial evidence that clerics are influenced by a set of structural factors that arise from the system of cleric education and training in the modern Middle East. While Western scholarship has primarily focused on Jihadist clerics as terrorists, my argument highlights their identity as scholars. I show how the seemingly mundane world of academic politics in Islamic educational institutions is intimately intertwined with the production of violent, transnational Jihadist ideology. Like Bourdieu (1984), I assert that the academy reflects, reproduces, and sometimes shapes the power relations of society.

In the following section, I provide some background on transnational Jihadi ideology. I then develop an explanation for variation in adoption of Jihadi ideology by clerics. I test this explanation using the writings and biographies of 101 contemporary clerics, along with interviews of clerics and students in Cairo, Egypt. I conclude by discussing the findings and their broader implications.

2 Jihad in Islam

Since the revelation of the Quran, the concept of Jihad has played a prominent and controversial role in Islamic political thought.[4] The term *Jihad* comes from the Arabic verb "to struggle" and is often translated into English as "holy war." The word "Jihad" appears in the Quran, although often with somewhat different connotations than the word carries today (Bonner, 2006, 21-22). The concept of Jihad as military defense of Islam existed during Muhammad's lifetime, although ideas about Jihad were not fixed at this early date (Mottahedeh and al Sayyid, 2001) and they remain contested today.

After the Prophet's death, interpretation of Islamic law fell gradually to the *ulama* — the scholarly religious elite. Among the many clerical understandings of Jihad, perhaps the modal interpretation is that there are two forms: the "greater Jihad" in which individuals struggle to purify their souls, and the "lesser Jihad" of armed defense of Islam and Muslim lands. In moderate

[4] It is impossible to survey the literature on Jihad in its entirety. Some recent works include Bonner (2006) and Devji (2005).

interpretations of Islam, violent Jihad is relatively unimportant and clerics that acknowledge it in principle are unlikely to advocate for it in practice.

The Salafi movement, a reform Islamist movement based on the interpretations of Ibn Taymiyya (1263 C.E. – 1328 C.E.), Muhammad Ibn Abd al-Wahab (1703 C.E. – 1792 C.E.), and Muhammad Rashid Ridda (1865 C.E. – 1935 C.E.), is the progenitor of modern Jihadi ideology (Wiktorowicz, 2005*a*, 2006). Salafis seek to purify Islam by following the perceived practices of the first generations of Muslims. Most Salafis are not Jihadis, and there is substantial animosity between "establishment" Salafi clerics and their Jihadi counterparts, but modern Jihadi ideology is best understood as a coupling of conservative Salafist ideology with a belief in violence as a legitimate tool for political change (Brachman, 2009).

I focus on transnational Jihadi ideology that attacks the West — the "far enemy" in Jihadi terms — as well as the governments of Jihadis' own countries (Gerges, 2005). Jihadis see themselves as actors in a cosmic struggle between good and evil which justifies violence against their perceived enemies. Jihadists believe that violent Jihad purifies the soul and advances the cause of justice (Brachman, 2009). Clerics in the Jihadi movement work to prove that various violent activities that are typically forbidden in Islam, such as terrorism, suicide bombing, and violence against non-combatants, are actually permissible or obligatory to counter the threat they perceive from the West.

3 A Theory of Cleric Radicalization

Only a few previous scholarly works have touched on the question of why some clerics become Jihadist while others do not. Al-Rasheed (2007) describes many of the same dynamics I identify and offers a nuanced account of cleric choices to ally with the Saudi state or endorse militant Jihad, but she does not advance a general causal argument about cleric choices. Zeghal (1999) hints that strategic motives may underlie expressions of radical Jihadi ideology as she traces the effects of the Egyptian regime's cooptation of its clerics from the 1950s onward. While both of these works anticipate key parts of my argument, they do not answer the question of why some clerics become Jihadist.

Most scholarship has focused on the lives and writings of a few individuals or the history of intellectual movements among the *ulama* (Wagemakers, 2012; Lia, 2008; Euben, 1999; Musallam, 2005; Hegghammer and Lacroix, 2011; Jackson, 2011; Kepel and Milelli, 2010; Euben and Zaman, 2009; Deol and Kazmi, 2012; Bergesen, 2007; Zeghal, 1999; al-Rasheed, 2007; Wiktorowicz, 2005*b*; Lacroix, 2011; Hegghammer, 2010; Brachman, 2009; Moghadam and Fishman, 2011; Lav, 2012). Most studies of Jihadi clerics focus only on a handful of individuals and texts, despite the fact that the Jihadi cannon contains thousands of texts by hundreds of authors.[5]. This is also true of scholarship on Muslim clerics more generally (Masud, Messick and Powers, 1996; Graf and Skovgaard-Petersen, 2009; Lazarus-Yafeh, 1981; Caeiro, 2011). These studies provide rich detail but with no systematic comparison of Jihadi clerics to non-Jihadi clerics, they cannot explain why some clerics adopt Jihadi ideology.

There is a substantial literature highlighting socialization, psychology, and poverty as possible drivers of Jihadi radicalization among *lay* Muslims, but many of these arguments do not extend easily to explain the choices of clerics.

In the socialization model proposed by Wiktorowicz (2005*b*) and Sageman (2004), relatively non-religious lay Muslims face personal hardship or societal alienation that induces frustration and leads them to seek new paradigms for understanding the world. Some may find social support in the company of other individuals under the guidance of a radical spiritual leader. Once introduced, they become convinced that an extremist cleric or group offers the most authentic interpretation of Islam. Previously non-religious individuals are most susceptible to radicalization because they lack confidence to question the claims of religious elites and are willing to adopt extreme positions to demonstrate their new-found commitment to the faith (Wiktorowicz, 2005*b*, 102). With religious credibility established, the extremist leader indoctrinates individuals to believe that militant Jihad is an essential religious duty that will help them achieve the salvation prioritized by their new-found religious conviction.

There are many psychological theories of Jihadi radicalization among lay Muslims (see Victoroff, 2005; Post et al., 2009; Lester, Yang and Lindsay, 2004; King and Taylor, 2011). One commonly

[5] An electronic collection of Jihadi indoctrination texts known as the *Mujahid's bookbag* contains 1,029 documents. The Jihadi web-library *Minbar al-Tawhid wal-Jihad* contains 5,433 documents by 457 authors.

cited possibility is that Jihadists have personality disorders or come from troubled backgrounds. In a test of this proposition, Sageman (2004) collects information about the childhoods of 61 Salafi Jihadists and finds that childhood behavioral issues or trauma are only evident in five cases. Other psychological theories link terrorism to individual levels of altruism (Pedahzur, Perliger and Weinberg, 2003), or to a personal quest for significance (Kruglanski et al., 2009), similar to the "pleasure in agency" that Wood (2003, 235) identifies as "the pleasure of together changing unjust social structures through intentional action." These psychological theories have proven difficult to test because of the inherent logistical problems of studying the psychology of violent, clandestine actors

Finally, poverty and poor education may drive terrorism of all types (Keefer and Loayza, 2008; Krueger, 2007; Krueger and Maleckova, 2003). Terrorism and political violence arise disproportionately from impoverished states where education levels are very low, but the actual perpetrators of terrorist violence are often relatively educated and well-off. One possible explanation for this stylized fact is suggested by Bueno de Mesquita (2005), who argues that terrorists will be more educated and wealthy than the average population, even if they are motivated by poverty, because terrorist organizations will only select candidates with high levels of human capital. Some recent evidence supports the argument that economic deprivation may be a source of terrorism, even if terrorists themselves are relatively well educated and well-employed (Benmelech and Berrebi, 2007; Benmelech, Berrebi and Klor, N.d.), but see (Lee, 2011).

Many of these arguments struggle to explain the radicalization of Muslim clerics. Unlike disaffected youth, clerics do not seem to fit the pattern of alienation and socialization articulated by Wiktorowicz (2005*b*) and Sageman (2004). Anecdotal evidence does not suggest that Jihadist clerics are psychologically troubled, although significance-seeking could be part of clerics' motivation. And while it is true that some clerics are poor, this often pious asceticism adopted as part of their devotion to religious life rather than a grievance driving violent resistance to the state.

3.1 Educational Networks, Career Incentives, and Jihadi Ideology

I argue that career incentives generated by the structure of cleric educational networks influence cleric ideology. Well-connected clerics typically enjoy successful careers within state-run religious institutions. In exchange for continued support from the state, they assist political elites by opposing — or at least not adopting — the ideology of militant Jihad. In contrast, clerics with weak educational networks cannot rely on connections to advance through the state-run institutions. Many pursue careers outside of the system by appealing directly to lay audiences for support. Adopting Jihadi rhetoric helps some of these clerics signal to supporters that they have not been theologically coopted by political elites.

The Entanglement of Religious and Political Institutions in the Middle East

The dynamics I identify are rooted in the institutional relationships formed between clerics and political elites in the Middle East when the region underwent modernization in the 19th and 20th centuries. Venerable religious institutions were coopted by political elites and brought under the aegis of the state (Crecelius, 1967; Zeghal, 1996; Fabbe, 2012). Rather than being supported by independent financial endowments, Islamic institutions were re-funded through government ministries and most clerics became government employees. They still led mosques, taught in schools, and issued fatwas, but career advancement became regulated by the state.

The purpose of this cooptation was to grant political elites religious legitimacy through connections to the *ulama*. By taking control of the previously independent financial endowments for all of the most important religious institutions, political leaders gained the ability to bring the clerical class into compliance by cutting off funding (Fabbe, 2012). Leaders could simultaneously neutralize any potential rebellion from clerics and lean on them to issue rulings legitimating controversial political projects.

This arrangement persists today and individual clerics do not have incentives or the opportunity to change the status quo. The most widely recognized and respected clerics are typically those at the top of the state-dominated hierarchy. The combination of material rewards, prestige, and public following that accrues to state clerics makes it very difficult for young clerics to resist this

cooptation, even when they are skeptical about close ties to the state.

Educational Networks

The structure of academic networks and the cleric job market in the state-dominated system influences cleric adoption of Jihadist ideology. The process starts when families enroll their child in a *kutab*, a school teaching literacy, basic arithmetic, and the Quran. Students who excel in religious subjects proceed through primary and secondary schools, before attending a religious finishing school (*ma'hid 'ilmi*) in cities like Cairo, Riyadh, or Mecca. After the finishing school, students typically enroll at an Islamic university, with the most popular schools being Al-Azhar University in Cairo, King Saud University in Riyadh, and the Islamic University of Medina. From interviews at Al-Azhar University, I found that the best university students often skip formal classes focused on memorization in favor of informal study circles (*halaqat*) taught by the most prominent clerics in the university's mosque. A student told me that, "often the best students don't actually go to class because it is so rigid. The not-so-good students just do the memorization."

While many study circles are public, the most intense mentoring relationships are formed in private study circles. At the end of a series of study circles, a teacher might issue an *ijaza* to each of his students — a certificate in the specific area of study. These credentials from individual clerics are typically more important than the formal university degrees that students receive.

The importance of connections to teachers is evident in the ways that potential students attempt to curry favor with the most prominent and well-connected clerics. Students seeking to join the private study circle of a cleric will attend his public study circles, sit in the front row, and be vocal during the question-and-answer session at the end of the lecture. Another point of entry is to attend prayers led by a prominent cleric. Afterward, potential students throng the cleric as he exits the prayer space, kissing him on the hand, asking permission to attend his classes, and trying to impress him with exceptionally clever questions about Islamic law.

Insider and Outsider Career Paths

Clerics face two broad career paths: an *insider* career in the state-dominated religious system or an *outsider* career. Insider careers are primarily defined by the persistent occupation of positions appointed, controlled, or regulated by the state. Many of these are academic careers, with clerics holding tenured or tenure-track positions at Islamic universities. These appointments are political; the governments in the Middle East have worked hard to manage the ideology of faculty at Islamic universities. Moreover, academic careers are a feeder track for the state clerical bureaucracy (Mazawi, 2005, 224). Insider clerics often start as academics and end up as officials in government ministries. Some academic positions are explicitly controlled by the highest levels of the government. For example, the biography of Abd al-Muhsin Abd al-Ibad notes that, "In 1393H he was appointed vice president of the Islamic University. He was chosen for this position by his Royal Highness King Faisal."[6]

Clerics in outsider careers seek financial support directly from lay Muslims rather than the state. Many clerics teach in their homes or at mosques where they do not hold official positions. There is also an international Islamic conference circuit and some outsiders make a career out of public speaking, teaching, or publishing. In some cases, clerics have day jobs that are unrelated to their religious role, such as the Egyptian cleric Ahmad Hutayba who works as a dentist.[7]

Clerics' career trajectories are often determined by who they know, and the endorsement of prominent clerics is extremely valuable. Equally talented and intelligent would-be clerics can face very different career options depending on their access to training with the most famous teachers. When I asked about becoming a cleric, one Al-Azhar student responded, "It's really all about trying to study with the prominent sheikhs and getting some kind of *ijaza* [certificate] from them if you can. You just try to get into people's networks." Another told me that he had moved from an Islamic school in Tunisia because, "the teachers in al-Qarawayyin were good, but the network here [at al-Azhar] is better." And speaking of how one might go about earning promotion as a cleric in contemporary Egypt, a student explained:

[6] http://ar.islamway.net/scholar/461, accessed 14 April 2014.
[7] http://shamela.ws/index.php/author/2333, accessed 14 April, 2014.

> Being in Ali Gomaa's crew [the Grand Mufti of Egypt at the time] is really the way to move up right now. That's how you get appointed to teach, how you get a position in the *Dar al-Ifta* [the Egyptian Fatwa Ministry], which gets you a nice car. He has lots of students, and he'll often favor them in promotions.

Career Paths and Ideology

Career paths condition the ideological positions expressed by clerics because the state finds militant Jihad threatening and incentivizes insider clerics to reject it. The few state-appointed clerics to openly endorse Jihadi ideology have been relieved of their appointments, arrested, and imprisoned (Lacroix, 2011; Brachman, 2009). Government-appointed clerics avoid even commenting on topics relating to Jihad. For example, as I sat in the study circle of Sheikh Ahmad al-Riyan in the al-Azhar mosque of Cairo, a student asked for his opinion on the controversial visit of Sheikh Ali Gomaa on April 18th, 2012 to the al-Aqsa mosque, violating a long-standing norm of not visiting Israel. Critics, including Jihadists, had been quite vocal in their condemnation because they believed the visit undermined the Palestinian cause. But as a member of the faculty of al-Azhar, al-Riyan is a state-appointed cleric. He chuckled and replied, "I don't like to speak about politics."[8]

Outsider clerics are less constrained because their financial support comes from lay Muslims who are not necessarily opposed to Jihadi ideology. Salafis are perhaps the largest demographic of lay Muslims motivated to support independent clerics. They form a substantial minority in almost all of the Arab Middle East and are particularly interested in proper clerical interpretation. Clerics appeal to Salafis by adopting the conservative Salafi ideology and practicing the Salafi methodology (*al-manhaj al-salafi*) of favoring direct interpretation of the Quran and *sunna* (the sayings of Muhammad) over the consensus of later Muslim jurists. Clerics compete to demonstrate their integrity and to persuade others that their rulings represent an accurate interpretation of Islam as intended in the original sources.

To attract support, outsider clerics try to send signals that they are expert and theologically independent. Jihadi ideology can serve as a credible signal of independence because it is different from the stances of establishment clerics and it is costly to adopt because of government repression.

[8]See http://www.youtube.com/watch?v=GgJiCFxBfvA#t=5900s, 1:38:18.

Thus, some clerics outside the state system adopt Jihadi ideology in order to gain popular support and advance their careers. This is not necessarily because Jihadi ideology is popular with most Salafi Muslims, though it can be. Rather, clerics gain religious credibility because they have demonstrated that they will speak their mind even when it is costly.

This signaling story resonates with the finding of Zeghal (1999) as she traces the effects of the Egyptian regime's attempts to coopt the clerics of Al-Azhar from the 1950s onward. She provides anecdotal evidence that when moderate clerics followed the regime's wishes and denounced violent Jihad, some clerics apparently endorsed Jihad specifically to show that they were not puppet clerics of the state. I also gain corraborating evidence of the signaling value of Jihadism from Wiktorowicz (2005*b*) who follows Omar Bakri Muhammad, a Jihadist cleric based in London. Although many of Omar's peers are supported by Saudi money, he is independently wealthy and has used his financial independence to cultivate an image of theological independence. His willingness to risk deportation or arrest by endorsing violence gives him even more credibility. According to one of Wiktorowicz's respondents, Omar "dares to say things that no one else does. Other religious leaders don't do that. They don't have the guts" (2005*b*, 144-145).

Not all outsider clerics will necessarily become Jihadists because other career paths are available. According to official reports cited by Gaffney (1994, 47), the ratio of private to state-run mosques in Cairo was roughly 6:1 through the 1960s and 1970s. A 1979 report of the Egyptian Ministry of Religious Endowments claimed that only 5,600 of the 34,000 mosques in Egypt were directly under the Ministry's control. Failure to find an insider job nudges clerics in the direction of Jihadism by eliminating the most attractive of the alternative career paths, but the relationship is not deterministic. Outsiders are more likely than insiders to become Jihadist, but the rates of Jihadism among outsider clerics may still be low.

If structure conditions ideology, then do clerics actually believe their theological positions? I expect that virtually all clerics truly believe their respective ideologies. Although material motivations may push clerics to a particular type of ideology, humans are remarkably adept at constructing personal narratives explaining such shifts in more palatable terms. Results from psychology show that individuals can come to believe statements they are compelled to recite (Janis and King, 1954),

meaning that clerics who adopt an ideology for wholly strategic reasons may ultimately come to deeply believe it. Thus, asking whether Jihadists are rational, strategic calculators or fanatical true believers creates a false dichotomy. It is likely that they are both.

4 Measuring Cleric Ideology and Characteristics

To test my argument, I select a sample of Muslim clerics and measure their adoption of Jihadi ideology using their writings. There is no way to feasibly determine the population of Muslim clerics, so randomly sampling clerics for analysis is not a possibility. Instead, I focus the analysis on contemporary Sunni clerics writing in Arabic. In order to compare Jihadi clerics to the those that were most likely to become Jihadi but ultimately did not, I intentionally over-sample two key groups of clerics: (1) Jihadi clerics and (2) conservative Salafi clerics who share similar beliefs to Jihadis but reject the ideology of militant Jihad. I collect texts and biographical information for 101 prominent clerics from Saudi Arabia (58 percent), Egypt (22 percent), and elsewhere.

4.1 Measuring Jihadi Ideology from Text

To measure the ideology of these clerics, I collect their books, articles, and fatwas with special emphasis on the latter. In Islam, questions of religious practice are brought by lay Muslims to a member of the *ulama* who answers in the form of a fatwa: a non-binding legal opinion (see Masud, Messick and Powers, 1996). Fatwas are ideal for measuring cleric ideology because they cover all topics, but some clerics do not issue fatwas (or do not record them) so I use books, articles, and sermons to measure cleric ideology where necessary. I collect these texts using the Internet, through online "fatwa banks" or clerics' own websites. I am not concerned about bias in the selection of texts for online distribution — the corpus of texts that clerics or their followers choose to disseminate widely is perhaps the *best* representation of their ideology.

Jihadi texts, such as this excerpt from Hamud al-Shuaybi, are often easy to identify.

> **Question:** The mujahideen in Palestine, Chechnya and other Muslim countries have carried out their Jihad against their enemies using so-called "martyrdom operations." These are operations in which one of the mujahideen puts on a belt of explosives, or

> puts them in his bag, or his car and then breaks into gatherings of the enemy, and their houses and then detonates himself seeking his own martyrdom and the death of his enemies. What is the ruling of such operations?
>
> **Answer:** These martyrdom operations are permitted actions when they are done for the sake of Jihad in the pathway of God, if the intent of the martyr is pure. These have been one of the most successful Jihadi methods and among the most effective against enemies of this religion...[9]

Non-Jihadist texts, such as this fatwa from Abd al-Azim bin Badawi, typically have very different content.

> **Question:** Awatif and Fardus are sisters. Awatif had two children: Muhammad and Maha, and Fardus had Ahmad, Ala, Ragad, Khaled, Sultan, and Gala. Awatif breastfed Sultan and Fardus breastfed Muhammad, and they each did so for an extended period of time. Is Adel, the husband of Awatif considered the father of all of Fardus' children? Is it permitted for the daughters of Fardus to reveal themselves around Adel or not?
>
> **Answer:** If a woman breastfeeds a child five different times while it is in the years of breastfeeding, he becomes her son, and she becomes his mother, and her husband becomes a father for him. There is no relationship between the husband of the nurse-mother and her sister, so it is not permitted for them to reveal themselves in front of him.[10]

Although distinguishing these texts is simple, a close reading of 27,142 texts from 101 clerics is infeasible so I turn to statistical machine learning (Hastie, Tibshirani and Friedman, 2009). My general approach is to compare each author's writings to a known Jihadi corpus and calculate statistical similarity. Authors with more similar writings are more Jihadist.

My method uses a text classification model trained on two sets of training documents, one Jihadi and one not. The Jihadi set consists of 765 texts circulated together on Jihadi web forums as the "Mujahid's bookbag."[11] These documents are curated and distributed by Jihadis themselves as sources of spiritual instruction and advice, as well as mixed political and religious commentary.[12] By using these documents as training data, I leave the difficult task of deciding which texts most accurately represent Jihadism to the Jihadists themselves. Because there are many non-Jihadi ideologies, I have no single curated set of texts to serve as the "non-Jihad" portion of the training

[9] http://www.tawhed.ws/r?i=dqokvsc5, accessed 14 April 2014.

[10] Available at http://ar.islamway.net/fatwa/13949?ref=w-new, accessed 19 March, 2013.

[11] One of the forums is here http://www.i7ur.com/vb/t9736.html and I accessed the zip file at http://www.megaupload.com/?d=0DXUXL2N on 1/27/2011. **Warning, the file may contain viruses!**

[12] For more analysis, see http://www.jihadica.com/a-mujahids-bookbag/.

corpus. Instead, I sample 1,951 texts from the 101 clerics in the study as the baseline for "average" cleric writing. Although there are Jihadi writers among these 101 clerics, the center of gravity is decidedly not Jihadi and I show below that using these texts as the "opposite" of the Mujahid's bookbag produces accurate cleric scores.

Following Beauchamp (N.d.), I train a Naive Bayes classifier to place documents on a scale from non-Jihadist to Jihadist. For each new document, I calculate a *Jihad score*:

$$Jihad\ score = \sum_i log \frac{P(w_i|J)}{P(w_i|J')}$$

where i indexes words, J is the Jihadi class of documents, J' is the non-Jihadi class of documents, $P(w_i|J)$ is the probability that word i occurs given that a document is Jihadi, and $P(w_i|J')$ is the probability that word i occurs given that a document is not Jihadi. I estimate these latter probabilities using the frequency of word w_i in the Jihadi and non-Jihadi training sets respectively.[13] Figure 1 shows which words distinguish between Jihadi and non-Jihadi documents. I plot words that indicate Jihadi ideology on the left in red, words that indicate non-Jihadi ideology on the right in blue, and words used equally in the center.

To produce cleric Jihad scores, I take each cleric's entire collection of documents, concatenate them into a single composite document, preprocess the text,[14] and calculate a Jihad score for this new, composite document. Heuristically, this procedure compares the word frequencies in each cleric's entire body of work to the training corpus and estimates the likelihood that that these frequencies would occur if the document came from the Jihadist portion.

These cleric Jihad scores are uncertain because each cleric, with the same latent ideology, could have written in slightly different ways. I estimate the uncertainty of my Jihad scores using a block bootstrap of each document (Lowe and Benoit, N.d.). For each document, I resample words in overlapping blocks of length 10, creating 200 bootstrapped versions. I then concatenate these

[13]The maximum likelihood estimate is $P(w_i|J) = \frac{W_i}{\sum_{i' \in J} W_{i'}}$, where W_i is the sum of total occurrences of word w_i in J. This creates problems because terms that do not appear at all in J automatically make $\prod_i P(w_i|J) = 0$. I use the standard solution of Laplace smoothing, such that $P(w_i|J) = \frac{W_i+1}{\sum_{i' \in J}(W_{i'}+1)}$.

[14]I stem the text using a modified version of the "light 10" stemmer (Larkey, Ballesteros and Connell, 2007) and remove words that occur in less than 10 percent of documents or more than 40 percent.

Figure 1: *A Word Cloud Representation of the Jihad Score Classifier*

This figure shows which words in the training corpus distinguish Jihadi documents from non-Jihadi documents by plotting Jihadi words to the left (darker red) and non-Jihad words to the right (darker blue). Word size indicates word frequency in the entire training corpus.

bootstrapped documents (as with the original documents) and calculate a cleric score from each bootstrap. The 2.5th and 97.5th percentiles of these scores provide a 95 percent confidence interval around each cleric Jihad score.

Figure 2 shows the distribution of the resulting cleric Jihad scores. For reference, I use arrows to indicate the scores of several prominent Jihadists (Usama Bin Laden, Abdallah Azzam, and Sayyid Qutb) and non-Jihadists (Ibn Baz and Ibn Uthaymeen). I illustrate differences in rhetoric across the Jihad score scale by calculating scores for three text excerpts. To show how the words in each excerpt affect the overall excerpt score, I color words that reduce the Jihad score in darker shades of blue and words that increase the Jihad score with brighter shades of red. Words shown in gray were dropped from the classifier because they occured in less than ten percent or more than 40 percent of documents (see footnote 14). The excerpt with the lowest Jihad score has only a single red word, meaning that the majority of words in this excerpt are indicative of non-Jihadi

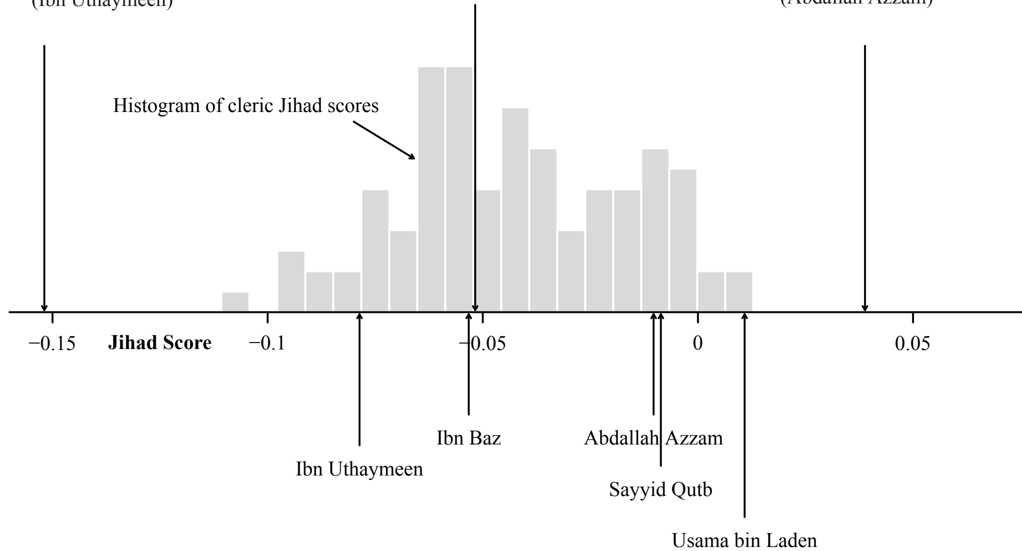

Figure 2: *Jihad Scores for Clerics with Benchmarking Texts*

This figure shows the distribution of cleric Jihad scores in gray, along with scores for excerpts from the writings of Ibn Uthaymeen, Sayyid Qutb, and Abdallah Azzam. For each excerpt, the words that actually enter the model are colored (the classifier omits the most and least frequent terms), with words indicating Jihadi ideology in darker red and words indicating non-Jihadi ideology in darker blue.

ideology. In contrast, a majority of words in Abdallah Azzam's excerpt are red, leading to a high Jihad score. The third excerpt demonstrates that the classifier can correctly score a non-Jihadi passage written by a Jihadist (from the introduction of *This is Religion* by Sayyid Qutb).[15]

To test whether my scores are accurate, I compare them to classifications by Jihadists themselves. My scores can correctly predict whether clerics will self-identify as Jihadist in their biographies, whether clerics are listed as friends of al-Qaeda in Ayman al-Zawahiri's 2008 treatise *The Exoneration*, and whether clerics appear on the popular Jihadist web library *Minbar al-Tawhid*

[15] Available at http://www.tawhed.ws/r1?i=3612&x=tsrhxvfc, accessed 19 March, 2013.

wal-Jihad. My scores also match expert assessments found in the *Militant Ideology Atlas* (McCants, 2006, Appendix 2), and Brachman (2009, pp. 26-41).[16]

4.2 Measuring Cleric Characteristics

Most clerics have biographies describing their lineage, upbringing, education, teachers, employment, scholarly works, students, endorsements by other clerics, and (when relevant) deaths. Collectively, the 101 clerics in my sample have 309 biographies available on the Internet, with a median of 556 words and a maximum of 57,838 words. I use information in these biographies to test whether educational networks and career paths influence cleric radicalization.

Number of Teachers

To assess whether educational network quality affects cleric adoption of Jihadi ideology, I reconstruct the educational network of the clerics from their biographies, shown in Figure 3. Gray arrows point from students to teachers. Colored nodes indicate clerics with Jihad scores, with darker shades of blue indicating lower scores and brighter shades of red indicating higher scores. The size of each node indicates the number of teachers, which is the feature of the network that I use to measure network quality in the analysis below.

Of the 101 clerics in my sample, 29 do not list any teachers. This surprised me because the perceived quality of a cleric's training depends almost entirely on the quality of their teachers, so clerics have every incentive to list their mentors. I interpret failure to list a single teacher is an indication of an extremely poor educational network. But is it possible that some clerics, particularly Jihadists, might under-report their network connections? Although it is difficult to disconfirm directly, I find no evidence of this. Jihadists and others highlight their connections to prominent teachers even when they disagree with their ideology because connections to famous clerics offer scholarly legitimacy.[17]

[16] I also consider whether anti-Jihadist fatwas might be mistakenly classified as Jihadist because they use similar words and discuss similar topics. I find some such texts in the corpus, but anti-Jihadist writing uses distinct terms (such as "terrorist"), and the aggregated works of Jihadists and non-Jihadist authors are quite distinct.

[17] For example, a supporter of Jihadist Nasir al-Fahd mentions is many establishment teachers here: https://www.youtube.com/watch?v=I6zZ5-uJFmY#t=102s. Jihadist Abu Muhammad al-Maqdisi mentions studying with many establishment clerics here: https://www.youtube.com/watch?v=XQ85NrN9Xh4

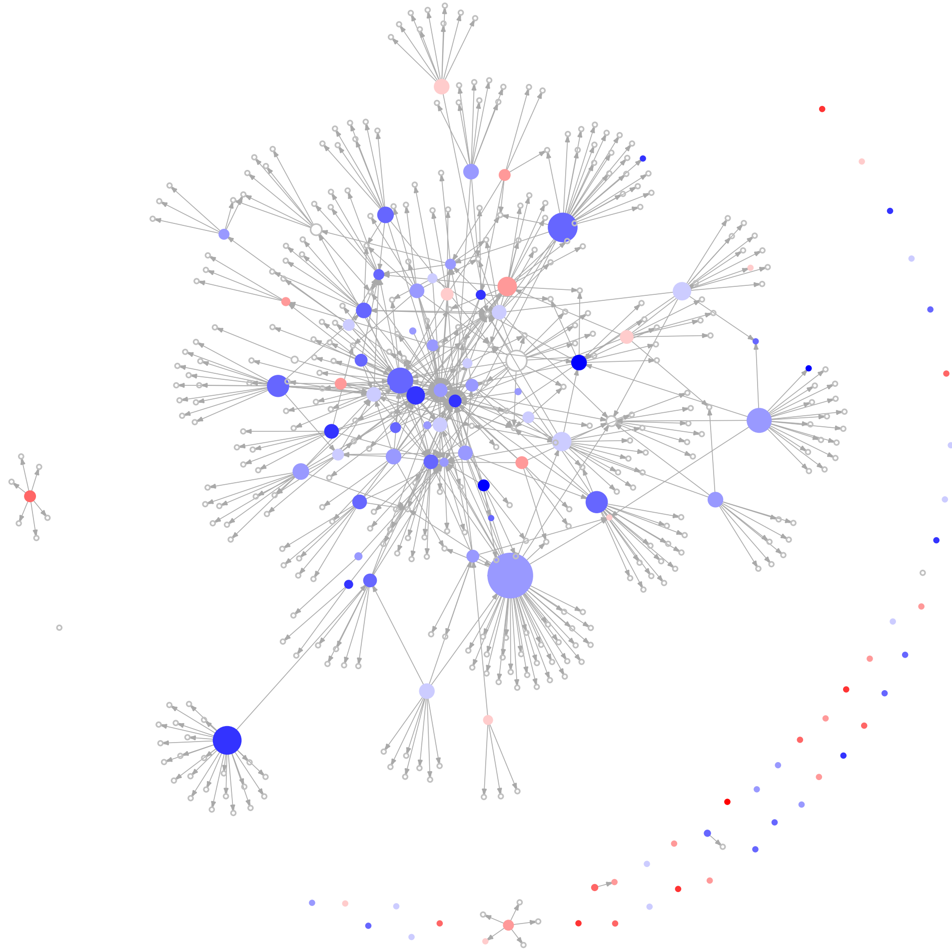

Figure 3: *An Educational Network of Clerics*

The network of teachers and students. Gray arrows point from students to teachers. Colored nodes show cleric Jihad scores, with darker shades of blue for lower scores and brighter shades of red for higher scores. Node size indicates the number of teachers.

Career Paths

To test the influence of career paths on radicalization, I code the number of "insider" and "outsider" positions listed in each cleric's biography. Knowing which positions are state-funded with absolute certainty is impossible, but professorships, positions on religious councils, national ministries for the distribution of *waqfs* (Muslim trusts), national fatwa offices, and the like are almost always controlled by the state. I use the count of state-funded positions over the life-time of a cleric as my measure of career paths in the analysis below.

Control Variables

I account for several alternative explanations for cleric adoption of Jihadi ideology using information from cleric biographies. I focus on potential confounders that may influence both network quality and subsequent adoption of Jihadi ideology.

- **Intellectual Ability.** Cleric intellectual ability could influence educational network formation, career paths, and ideology. It is difficult to measure intellectual ability directly, but cleric biographies provide some hints about educational attainment and religious expertise.

  First, I record whether a cleric has (1) a master's degree and (2) a doctoral degree in a subfield of the Islamic sciences. Fifty-four percent have a master's degree, while 38 percent have a doctorate degree.

  Second, many clerics list that they have memorized the entire Quran (making them a *hafiz* — "one who preserves") Biographies tend to highlight the early age and great speed with which clerics completed the task. For example, the biography of Abd al-Rahman al-Dawsary states, "It was amazing that he was able to memorize the entire Noble Quran in his seventh year, as he says himself (God have mercy on him): 'I memorized the Noble Quran in two months. I cut myself off from people and locked myself in my library and didn't come out except for prayers.'"[18] I assume that clerics of all ideologies are equally likely to under-report having memorized the Quran, and that clerics who do not mention memorizing the Quran are less likely to have done so. Under these assumptions, reported Quran memorization may be useful as a rough proxy for intellectual and religious ability. In my sample of 101 clerics, 36 percent mention memorizing the Quran.

- **Poverty.** Clerics' biographies rarely describe the material circumstances in which they were raised, so it is difficult to directly test the hypothesis that clerics who grew up in poverty are more likely to be Jihadist. Some biographies describe clerics' humble circumstances, but the apparent purpose is to demonstrate piety and humility later in life.

  As an extremely rough proxy for poverty, I measure the wealth of the country in which

[18] http://ar.islamway.net/scholar/376/%D8%B9%D8%A8%D8%AF-%D8%A7%D9%84%D8%B1%D8%AD%D9%85%D9%86-%D8%A7%D9%84%D8%AF%D9%88%D8%B3%D8%B1%D9%8A, accessed 30 June, 2014.

each cleric was born (in GDP per capita) at the year of their birth, or at the earliest year for which there is recorded data (data from Gleditsch (2004)). This may offer some control for the economic milieu in which clerics were born and raised, but it cannot capture variation at the sub-national or family level.

- **Cleric families.** Some clerics have relatives who were also clerics. Individuals in these "cleric families" may have better networks because they inherit the network of their family member (al-Rasheed, 2007, 27-28). I control for this using an indicator variable specifying whether a cleric's biography mentions a relative who is a cleric.
- **Religious primary school.** In the Muslim world, religious and secular primary school systems often exist side by side. Enrollment in religious primary school might help future clerics develop better education networks because they start establishing connections at an earlier age. Information on primary schooling is not available in all biographies, but to the extent possible, I code whether each cleric was enrolled in religious or secular primary school.
- **Western exposure.** Some argue that exposure to Western society was a radicalizing influence on Sayyid Qutb (Wright, 2006, 9-23). I test whether exposure to the West is a plausible explanation for adoption of Jihadi ideology by coding whether a cleric mentions spending time in one or more of the advanced Western democracies during their formative years and education. I do not include time spent in the West after a cleric has already radicalized, and I also do not include clerics who travel to Western countries for lectures or missionary work later in life.

There are several variables that could confound the relationships between networks, career paths and ideology that I am unable to measure.

Some individuals could adopt Jihadi ideology before their graduate training. If radicalized students are less inclined to connect with teachers, this could induce a spurious correlation between networks and ideology. I find no evidence in cleric biographies that any of the 101 individuals in my data set had radicalized prior to forming their academic networks. Unfortunately, there is no way to systematically measure each cleric's ideology at the start of their education because most

had not yet produced texts.

I also have difficulty accounting for the influence of teacher ideology on students during the education process. This is difficult to measure because the sample is stratified — some clerics do not list any teachers so teacher ideology is undefined for these individuals.[19] Even for clerics who list teachers, it is difficult to know which teacher was most ideological influential.

Finally, it is possible that Jihadi clerics share some personality trait that makes them less likely to connect with teachers and more likely to adopt the Manichean world-view of militant Jihad. Although it might seem intuitive that Jihadi ideologues are more inclined to be loners, lack social skills, or have unpleasant personalities, this does not match with anecdotal accounts. Ideally, I would control for personality factors, but I have not identified any way to accurately measure them.

Should my findings be discounted because of these missing control variables? I argue no. The relationship between networks, career paths, and ideology presented below is substantial and I find additional support for my theory from interviews and observation at al-Azhar University. However, education networks and career paths certainly do not explain all of the variance in cleric Jihad scores, so other processes that I cannot measure, including those listed above, may be simultaneously shaping cleric ideology

5 Findings

In this section, I document bivariate correlations between the number of teachers, appointments to state-funded positions, and Jihad scores. I then present more complex models that confirm the basic relationships and give stronger evidence that they are causal.

5.1 Bivariate Correlation

First, I demonstrate that strong bivariate relationships exist between the number of teachers, insider career paths, and adoption of Jihadi ideology. Although this simple regression does not account

[19] I do not attempt to impute values for these because there is logically no teacher ideology to impute.

for potential confounding, it demonstrates the fundamental correlations that persist through all of my increasingly complex statistical tests.

The left panel of Figure 4 shows the relationship between each cleric's number of teachers and their Jihad score. I find a negative correlation that is statistically significant ($p = 0.02$). Substantively, the relationship is moderate — an increase from the 25th percentile (zero teachers) to the 75th percentile (9 teachers) only reduces the predicted Jihad score by about 0.3 of a standard deviation. The right panel of Figure 4 shows a scatter plot of cleric Jihad scores by the number of insider (state-funded) positions each cleric has held. The regression fit indicates a statistically significant relationship ($p < 0.001$). The model predicts that changing a cleric from having held 10 insider positions to none would change the predicted Jihad score by slightly more than a standard deviation. These effect sizes are large enough to change a borderline Jihadist to a non-Jihadist, but not large enough to change a hardcore Jihadist to a non-Jihadist.

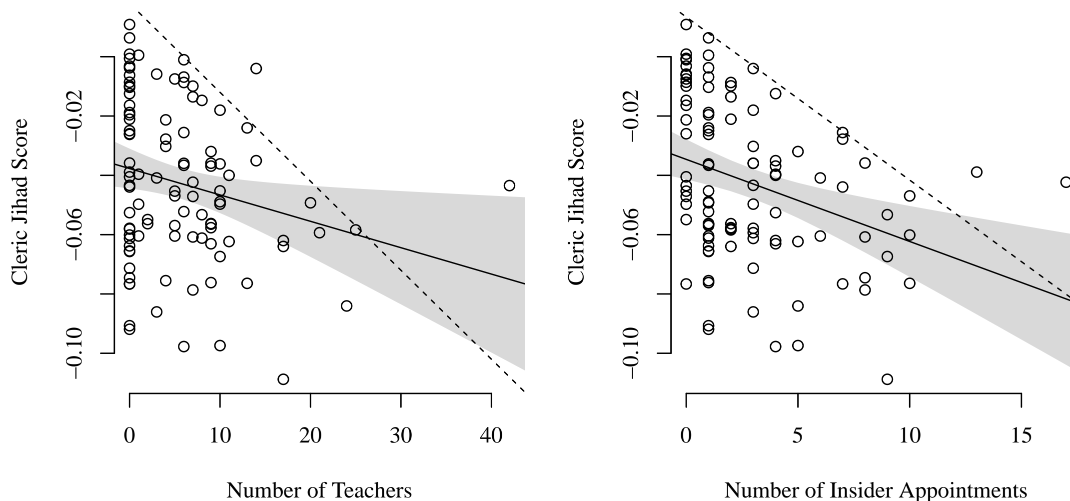

Figure 4: *Correlation Between Networks, Insider Appointments, and Jihad Scores*

The left panel shows the correlation between the number of teachers (x-axis) and cleric Jihad Scores (y-axis) with the regression fit and 95% confidence interval shown in gray. The right panel shows the same for the number of "insider" appointments for each cleric (x-axis) and their Jihad Score (y-axis). The dashed lines separate regions of the figure with many observations from regions with very few (these patterns are consistent with necessary, but not sufficient, conditions for Jihadi ideology).

Both scatter plots can be interpreted as support for the hypothesis that low numbers of teachers and insider appointments are *necessary conditions* for Jihadist ideology. Both scatter plots

are characterized by regions that are heavily populated with observations and regions that have virtually no observations (divided by diagonal dashed lines in Figure 4). The locations of the data are consistent with the claim that having very few teachers and insider appointments is a necessary, but not sufficient, condition for a high cleric Jihad score. As connections and appointments increase, the maximum possible level of Jihadi ideology appears to decrease systematically and almost linearly.

I can explain even more of the variation in Jihad scores by examining the interaction of network connections and career paths. For simplicity when interpreting the interactions, I dichotomize the continuous variables for networks, career paths, and ideology. I classify clerics as having *limited networks* when they have no teachers or *extensive networks* otherwise, *insider careers* when they have one or more insider positions or *outsider careers* otherwise, and *Jihadist ideology* when when their Jihad score is greater than -.022 and *non-Jihadist ideology* otherwise.[20] This allows me to present the results of the interaction between centrality and appointments in a two-by-two table, shown in Table 1.

Full sample of 101 clerics

	Outsider Career	Insider Career
Limited Network	70% (7/10)	30% (8/27)
Extensive Network	54% (6/11)	11% (6/53)

56 clerics with Masters degrees

	Outsider Career	Insider Career
Limited Network	66% (2/3)	20% (4/20)
Extensive Network	50% (1/2)	7% (2/31)

Table 1: *Percentage of Jihadi Clerics by Number of Teachers and Career Path*

The left panel is a two-by-two table where the cell values are the percentage of Jihadi clerics, the rows show whether clerics have limited networks (no teachers) or extensive networks (one ore more teachers), and the columns show outsider career paths (no state-funded appointments) versus insider career paths (one or more state-funded appointments). The right panel shows the same, but for the 56 clerics who have at least a Masters degree.

As my theory predicts, I find that clerics with limited networks and outsider career paths are the most likely to become Jihadist (see the left panel of Table 1). Seventy percent — or 7 out of 10 — in this cell of the table become Jihadist. In contrast, clerics with well-connected networks and

[20] This cut-point of -.022 comes from validation of the naive Bayes classifier.

insider careers are much less likely to radicalize, with only 11 percent (6/53) becoming Jihadist. Clerics who are poorly connected but manage to break into the insider career track are at relatively low risk of becoming Jihadist (30 percent) while clerics who have one or more teachers but do not have insider careers are somewhat more likely to become Jihadist (54 percent). This offers some preliminary evidence that the impact of cleric academic networks is moderated by the results of the job market.

My theory cannot explain the radicalization of clerics who were never interested in an academic career. It is difficult to measure the career goals held by each cleric during their early years, but one reasonable procedure is to restrict the analysis to clerics who have at least some graduate education in the direction of an academic career. In the right-hand panel of Table 1, I analyze only the 56 clerics with at least a Masters degree. Even in this restricted sample, I find that the interaction of teacher networks and career paths remains a strong predictor of Jihadist ideology, suggesting that my theorized mechanism is a driver of radicalization for at least some Jihadist clerics.

5.2 Regression Analysis

Next, I estimate regression models predicting the same set of outcomes as the previous section, but with covariates included. I find that after controlling for other factors, educational networks and career paths are strongly predictive of expressed Jihadi ideology.

The outcome in all models is the continuous Jihad score for each cleric. I control for the covariates described above: cleric family, *hafiz* status, religious primary school, master's degree, doctoral degree, Western exposure, and GDP per capita of the cleric's home country in the year of their birth.[21] With these covariates, I start interpreting the models causally, although this interpretation depends crucially on the assumption that there are no unmeasured confounders. If this assumption does not hold, the models still demonstrate that educational networks and career paths can predict subsequent cleric radicalization. I use regression with bootstrapped standard errors, with 200 bootstrapped samples of the data set.[22]

[21] I do not control for Master's degrees in Model 2 because having a Master's degree is part of the inclusion criteria for the sample.

[22] This is about the minimum number of bootstraps that is recommended (Efron and Tibshirani, 1993). The reason for 200 rather than, say, 1000 bootstrapped samples is computational: the block bootstrap of the words in

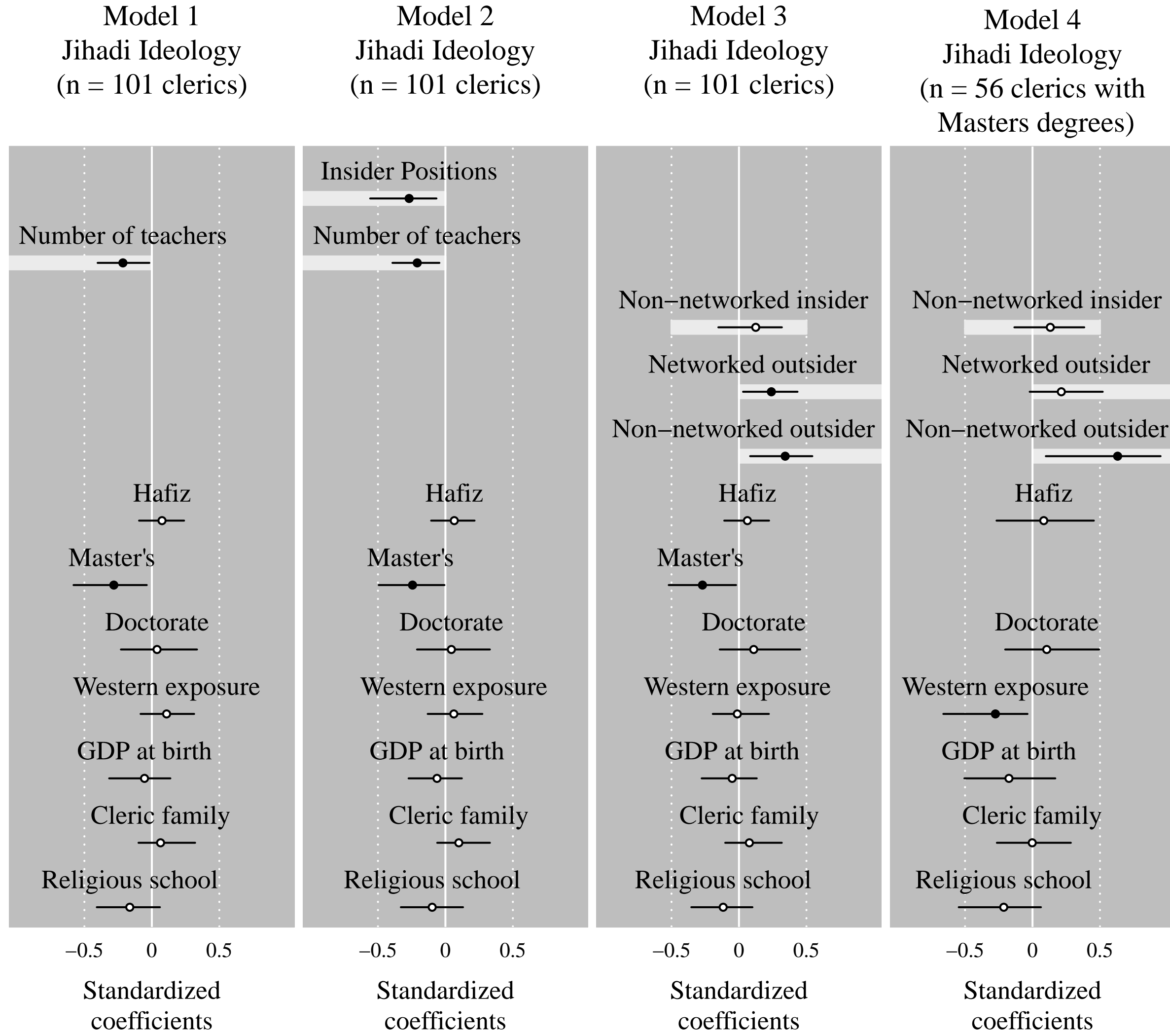

Figure 5: *Regression Models Predicting Jihad Scores*

The standardized coefficients of four regression models predicting cleric Jihad scores. Point estimates are represented by points with 95% confidence interval bands. Statistically significant coefficients have filled disks, while statistically insignificant coefficents have open disks. For variables about which my theory makes a prediction, I highlight the region that the theory predicts in lighter gray to show which hypotheses are supported by the models.

In Model 1, I test whether *Number of teachers* has an effect on cleric Jihad scores, conditional on the covariates. Model 2 then tests whether the number of *Insider Positions* has an effect on cleric Jihad scores. In this regression, I control for the number of teachers as well, because this is part of the assignment mechanism for *Insider Positions.* As such, I interpret the regression coefficient on

each document is computationally intensive.

Number of teachers causally in Model 1 but *not* causally in Model 2.

Models 3 and 4 mirror the analysis in Table 1. I use the same dichotomized variables for teacher networks and career paths to define four indicator variables containing information about the interaction of networks and career paths: (1) *non-networked outsiders*: clerics with no teachers and no insider jobs, (2) *networked outsiders*: clerics with teachers but no insider jobs, (3) *non-networked insiders*: clerics with no teachers, but insider jobs, and (4) *networked insiders*: clerics with both teachers and jobs. I use *networked insiders* as the baseline category and then estimate the effect for each of the other designations by including them as predictors in a regression with a continous measure Jihadi ideology as the outcome variable.

Figure 5 presents the results of these regressions. The outcome is continuous, so the raw coefficients are interpretable, but the Jihad scores themselves are not particularly meaningful because the scores are on an arbitrary, unitless scale. For easy interpretation, I standardize the coefficients in Figure 5 so that they can be interpreted as follows: "a one standard deviation change in x predicts a β standard deviation change in y."

The results of these models support my theory. In Model 1, I find that clerics who have more teachers are substantially less Jihadist. According to the model, increasing the number of teachers by one standard deviation (6.9 teachers) leads to a -.21 standard deviation decrease in cleric Jihad score. Substantively, this means that a cleric who gained seven additional teachers will move down the list of Jihadists an average of 6 spots. This is relatively modest movement, but depending on where the cleric starts, it could be enough to move a cleric from Jihadist to non-Jihadist.

Model 2 in Figure 5 shows that clerics who hold more insider positions over their careers have lower Jihad scores. Increasing the number of insider positions by one standard deviation (3.3 positions) leads to a -.27 standard deviation change in cleric Jihad scores. In substantive terms, a cleric who had an additional 3 insider appointments would move an average of 8 spots down the list of Jihadists.

Models 3 and 4 confirm the findings from Table 1. Consistent with my theory, I find that the interaction of having no teachers and an outsider career predicts substantially higher cleric Jihad scores than the baseline category of clerics with teachers and insider careers. Clerics who have

outsider careers are also at greater risk even if they have teachers, suggesting that the career path effect dominates the effect of teachers to some extent. This supports my claim that the inability of clerics to find suitable positions in the state-run religious institutions is a factor pushing some toward radicalization, even if they have good teacher networks from graduate school.

Most of the alternative explanations for cleric radicalization find no empirical support. Clerics are not more likely to adopt Jihadi ideology after spending time in the West, or if their respective countries of origin were poorer at the time of their birth. There *is* evidence that clerics with a Masters degree are less likely to become Jihadist, although there is not similar effect of having a doctorate. This provides some evidence that clerics with greater intellectual ability may be less prone to Jihadism, although the other measures of religious and academic ability — a doctorate and reported memorization of the Quran — do not have similar effects.

These findings are robust to a number of alternative specifications that I do not have space to present here. First, the findings are robust to my choice of bootstrapped standard errors — I obtain similar estimates of statistical uncertainty when I use either ordinary regression standard errors or heteroskedastic consistent standard errors. The findings persist when I dichotomize the outcome variable into a binary indicator for Jihadists and re-estimate the models using logistic regression. They also persist if I chose other reasonable cut-points for dichotomizing these variables for the interactions in Models 3 and 4, or if I instead interact the continuous measure of *Number of Teachers* with *Insider Positions*. Finally, the findings persist when I apply exact matching to the data set and re-estimate the regressions.

It is more difficult to provide quantitative evidence about the motives for non-networked, outsider clerics who turn to Jihadism. I have argued that this adoption happens in part because Jihadi ideology allows clerics to differentiate themselves in a crowded religious marketplace and garner the support necessary to sustain a career without government funding. Here, I provide some anecdotal evidence supporting this claim by showing that Jihadist clerics attempt to highlight their arrests and incarcerations to potential followers as credentials. The biographies of Jihadi clerics repeatedly stress instances where a cleric's unwillingness to make ideological compromises led to punishment by regime authorities. This credible demonstration of independence may further these clerics ca-

reers by helping them appeal to lay Muslims who have preferences for independent clerics. For example, the biography of Rafai Surur lionizes him for his willingness to go to prison for his Jihadi beliefs. "The sheikh was included in the defendants of the case [number; 462, of 1981, Supreme State Security], known by the name 'Case of the Organization of Jihad.' He was an example of the Noble Lion and the Patient Sheikh, that does not bend to the tyrants and bows only to God."

As my theory predicts, clerics who renounced their Jihadi ideology after being imprisoned do not attempt to use prison time as a credential. Most notably, three Jihadi members of the "awakening" movement — Aid al-Qarni, Safar al-Hawali, and Salman al-Awda — renounced Jihadi ideology after spending significant time in Saudi jails during the 1990s. Unlike other clerics who have retained their Jihadi orientation, these three clerics have little incentive to play up their incarceration. The prison time of these "reformed" clerics is a reminder that they ultimately gave up Jihadi ideology to appease political elites, rather than being a symbol of theological independence.

The biographies of these three clerics mention their arrests and imprisonment, but in tellingly opaque language. Salman al-Awda mentions his prison time in a paragraph at the end of his biography in vague terms that elide his former involvement with Jihadism: "The Sheikh was imprisoned for five years, from the year 1415 AH to the end of 1420 AH, due to some lessons and stances."[23] Safr al-Hawali is even more terse, simply mentioning under the heading "Important Events" that he was arrested from 1994 to 1999.[24] Collectively, the three "reformed" clerics mention their prison time an average of only two times per biography, while Jihadi clerics who have been imprisoned mention this fact an average of eight times in their biographies (and some as many as 25 times). This evidence suggests that Jihadist clerics see signaling value in highlighting their jail time for the sake of Jihad, while establishment clerics do not.

6 Conclusion

Why do some Sunni Muslim clerics voice more support for the ideology of militant Jihad in their writings than others? I advance a theory of cleric radicalization in which clerics' ideologies are

[23] http://ar.islamway.net/scholar/1/%D8%B3%D9%84%D9%85%D8%A7%D9%86-%D8%A8%D9%86-%D9%81%D9%87%D8%AF-%D8%A7%D9%84%D8%B9%D9%88%D8%AF%D8%A9, accessed 30 June, 2014.

[24] Archived by the author at [redacted].

influenced by the quality of their educational network connections and their subsequent employment prospects. When young, pious men begin the process of becoming a clerics, they become embedded in educational networks of teachers. Students that build strong networks with many ties to prominent teachers have advantages when seeking employment in clerical academic circles — the types of positions and careers that are funded by the Egyptian and Saudi governments. Students who have fewer connections are less likely to successfully negotiate this academic pathway because they cannot leverage their prestigious connections to get a job. Instead, they seek other types of employment that are typically outside of the state-run system of religious institutions. There are many options for outsider clerics, but becoming Jihadist is one available career path that may be attractive. Specifically, in the crowded market of outsider clerics vying for financial support, Jihadi ideology may help clerics win patrons by signaling their independence from the regime.

I test this argument by amassing a substantial new data set of writings and biographical information for 101 Salafi Muslim clerics who are among those most likely to become Jihadist. I develop a method for estimating the degree to which each of these clerics expresses the ideology of militant Jihadism. I find that the factors suggested by my theory — the strength of their academic networks and their subsequent career paths — predict cleric choices to adopt or reject Jihadi ideology. A variety of tests suggests that there is reason to believe that this relationship is robust, although establishing causation conclusively remains difficult.

What, if anything, can policy-makers in Arab or Western countries do to limit the adoption of Jihadi ideology? Policy-makers in the West often seem concerned about radicalization in Muslim educational contexts. An article by Susan Moeller found that commentators from a wide range of political perspectives — including Thomas Friedman and Newt Gingrich — uniformly view Islamic education as a radicalizing force.[25] The link between the *madrassa* and terrorism seems firmly entrenched in the minds of policy-makers.

My research questions this link, at least for a certain set of schools and students. Although there may be Islamic schools that radicalize students, there is not substantial evidence in my data that school attendance at any level led some clerics to be more radical than their unschooled

[25] http://yaleglobal.yale.edu/content/jumping-us-bandwagon-%E2%80%9Cwar-terror%E2%80%9D.

counterparts. Instead, I find that *failures* in the graduate education process are more likely to produce future Jihadi ideologues. Students who have less access to prominent graduate mentors have the greatest risk of edging toward violent extremism. Rather than adopting the mantra that all Islamic schooling is radicalizing, policy-makers should consider the possibility that more education might forestall radicalization, even if that education is in a very conservative, Islamist environment.

More tentatively, my research suggests that the preferred counter-radicalization policy of Arab regimes — arrest and imprisonment — may be a double-edged sword. Incarcerating Jihadi clerics counteracts the pressures toward Jihad by raising the cost of a career based on Jihadi ideology, but it also increases the signaling value of adopting Jihadi ideology. Prison may not be effective if the hard-core Jihadi clerics are willing to bear the cost of increased repression because it makes them more credible in the eyes of their followers.

Instead, my research suggests that co-opting clerics may be more successful. Doing so in the late stages of cleric ideology development is difficult because clerics who successfully resist "selling out" to cooptation will send the same costly signal about their theological independence as clerics who risk imprisonment. Rather, successful cooptation starts early, by providing more clerics with access to better educational networks and ultimately, the possibility for better career prospects.

Jihadi ideology is often perceived to be the result of immutable, irreconcilable conflicts between fundamentalist Islamism and Western society. My findings suggest that this interpretation, while rhetorically convenient for actors on both sides, is partially false. In fact, the primary ideologues fueling the Jihadist movement appear to do so because of career incentives rather than ancient hatreds. Hatred may exist, but this animosity does not explain why some clerics endorse violence.

Instead, adoption of militant Jihadi ideology is influenced in part by the structure of seemingly mundane social networks, career incentives, and domestic political institutions. Western scholarship understands Muslim clerics to be many things — religious leaders, preachers, writers, militants, extremists and moderates. But very little Western scholarship has recognized that these clerics are academics. This fact, and the fact that not all clerics make it on the academic track, is an underappreciated cause of the production and reproduction of modern Jihadi ideology.

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