



Capstone Seminar April 2018

Gender, Terrorism, and Foreign Fighters

Sarah Ascol, Wiam Ayachi, Ashley Lovell, Kayla McGill,
Emiley Pagrabs, and Ryan Yandell

Capstone Mentor: Dr. Valerie M. Hudson

Report prepared for the Office of Global Women's Issues,
US State Department

Table of Contents

Executive Summary	1
Introduction	1
Literature Review	2
Orienting Interviews	3
Theoretical Framework	4
Research Design	8
Aggregate Statistical Analysis	8
Case Studies	11
Conclusion	14
Appendix	17

Executive Summary

This paper examines the nexus between gender and terrorism to determine whether there is a relationship between the treatment of women and terrorism. The question is analyzed with a specific focus on foreign fighters. This paper explores previous literature to fully elaborate on the concepts of radicalization, gender, and terrorism, and it suggests four mechanisms by which gender inequality can be linked to these phenomena.

This study incorporates a mix of qualitative and quantitative methods. It draws upon aggregated statistical testing using quantitative data collected on the production of foreign fighters, including their countries of origin and the differing gender dynamics therein, and examines qualitative data gathered from expert interviews and foreign fighter case studies. Data analyzed from this project reveals that there is a significant association between gender inequality and the production of foreign fighters. However, a greater emphasis must be placed on gender-related variables in data collection on terrorism and foreign fighters. If more accurate and detailed data were available, a more thorough analysis could be performed. A more comprehensive version of this research is available upon request.

Introduction

Studies of gender and studies of terrorism are not mutually exclusive, but most research has treated them as such. Gender dynamics such as norms, roles, and biases have influenced societies since the beginning of human history. However, very little research has addressed how gender components factor into foreign fighter production.¹

Despite the massive surge of interest in terrorism studies post-9/11, a large gap still exists in the literature of radicalization regarding relevant gender dimensions. Fortunately, the development of the Women, Peace, and Security agenda, supported by the United Nations Security Council Resolution 1325, provides an excellent opportunity for policymakers, practitioners, and academics to examine the relationship between terrorism and gender.² In addition, the public is beginning to recognize a link between terror in the home and mass violence, rendering such research of interest to a broader audience than academia.³

¹ Foreign Terrorist Fighters are defined by the United Nations as "individuals who travel to a State other than their State of residence or nationality for the purpose of the perpetration, planning, or preparation of, or participation in, terrorist acts or the providing or receiving of terrorist training, including in connection with armed conflict"; "Foreign Terrorist Fighters," Security Council: Counter-Terrorism Committee, accessed April 2, 2018.

² "What is UNSCR 1325: An Explanation of the Landmark Resolution on Women, Peace and Security," United States Institute of Peace, accessed January 14, 2018.

³ Valerie Hudson, "Women's Role in Countering Terrorism," (testimony, Subcommittee Hearing: Terrorism, Nonproliferation, and Trade, Washington, DC, February 27, 2018).

Studies of gender and studies of terrorism are not mutually exclusive, but most research has treated them as such. Gender dynamics such as norms, roles, and biases have influenced societies since the beginning of human history. However, very little research has addressed how gender components factor into foreign fighter production.¹

Despite the massive surge of interest in terrorism studies post-9/11, a large gap still exists in the literature of radicalization regarding relevant gender dimensions. Fortunately, the development of the Women, Peace, and Security agenda, supported by the United Nations Security Council Resolution 1325, provides an excellent opportunity for policymakers, practitioners, and academics to examine the relationship between terrorism and gender.² In addition, the public is beginning to recognize a link between terror in the home and mass violence, rendering such research of interest to a broader audience than academia.³

The team behind this report investigated the relationship between gender and the production of foreign fighters for ISIS by examining an 80-nation set of countries. Linking gender-related variables to four theorized social mechanisms, we created a framework for assessing how stressors related to gender play a part in the radicalization process.

What follows is a summary of our methods, reasoning, empirical analysis, real-world case studies, and recommendations moving forward. It is the team's objective to provide the U.S. Department of State's Office of Global Women's Issues with a running start in the exploration of this important linkage.

Literature Review

In recent years, studies of radicalization have proliferated, identifying similarities across all extremist organizations regarding how and why individuals join these societies. In many cases, individuals have been attracted to extremism due to perceived injustices committed against them, a lack of belonging, a cognitive inability to cope with social change or upheaval, a psychological trauma, or a drive for personal significance.^{4 5 6} Although research on radicalization has been extensive, gaps exist in the literature—especially with regard to gender dimensions.

¹ Foreign Terrorist Fighters are defined by the United Nations as "individuals who travel to a State other than their State of residence or nationality for the purpose of the perpetration, planning, or preparation of, or participation in, terrorist acts or the providing or receiving of terrorist training, including in connection with armed conflict"; "Foreign Terrorist Fighters," Security Council: Counter-Terrorism Committee, accessed April 2, 2018.

² "What is UNSCR 1325: An Explanation of the Landmark Resolution on Women, Peace and Security," United States Institute of Peace, accessed January 14, 2018.

³ Valerie Hudson, "Women's Role in Countering Terrorism," (testimony, Subcommittee Hearing: Terrorism, Nonproliferation, and Trade, Washington, DC, February 27, 2018).

⁴ John Horgan, *The Psychology of Terrorism* (London: Routledge, 2005).

⁵ Arie W. Kruglanski, "Psychology Not Theology: Overcoming ISIS' Secret Appeal," *E-International Relations*, October 28, 2014.

⁶ Krista L. Couture, "A Gendered Approach to Countering Violent Extremism: Lessons Learned from Women in Peacebuilding and Conflict Prevention Applied Successfully in Bangladesh and Morocco," Brookings Institution, July 2014.

The latest research suggests a link between society's treatment of women and societal inclination toward violence, revealing both macro-level and micro-level interrelationships between gender indicators and violence. In *Sex and World Peace*, Valerie Hudson et al. argue that the greatest security dilemma is "the systemic insecurity of women – half the world's population."⁷ The social status of women has cascading effects throughout society and state, as "gender inequality is a form of violence that creates a generalized context of violence and exploitation at the societal level."⁸

Orienting Interviews

To gain enhanced insight into the paths to radicalization, and to determine how experts view gender dynamics in regard to terrorism, we interviewed several practitioners and scholars in preparation for this study. This allowed us to orient our research to determine whether indicators exist that signal a shift towards radicalization, and if identified gender variables play a role in the process.

We spoke with scholars Alexandra Bain, a professor at St. Thomas University who has conducted studies on ISIS; Alexis Henshaw, professor at Duke University focusing on rebel groups and women; Richard Mac Namee, former MI5 and current professor at Texas A&M who specializes in terrorism and radical groups; and Anne Aly, counter-extremism specialist who offered insights into the patterns and influences of radical behavior.⁹ We also had the opportunity to interview mothers whose sons have radicalized and joined ISIS, namely Christianne Boudreau and Nicola Benyahya.¹⁰ Both of these mothers founded organizations, Hayat Canada Family Support and Families for Life (UK) that provide support to families with relatives who have radicalized or are involved with violent terrorist groups. Our research team found it useful to speak with these mothers because they continue to work with those directly impacted by radicalization and offer a unique perspective when understanding radicalization. Finally we talked with practitioners in security and counterterrorism such as Haras Rafiq, CEO of the Quilliam Foundation, and Mustafa Tameez, former security consultant to the Department of Homeland Security, who discussed with us various concepts and commonalities they perceived to be important in exacerbated radicalism on the individual level.¹¹

7 Valerie M. Hudson, Bonnie Ballif-Spanvill, Mary Caprioli, and Chad F. Emmett, *Sex and World Peace* (New York: Columbia University Press, 2012), 4.

8 Ibid, 5.

9 Dr. Alexandra Bain is a professor at St. Thomas University where she studies radicalization and terrorism. She also is the director of Hayat Canada, a family support group that works with those impacted by radicalization. Richard Mac Namee is a professor at the George HW Bush School of Government and Public Service at Texas A&M, where he specializes in terrorism and radical groups. Dr. Anne Aly is a specialist in counter-extremism and terrorism studies in Australia, where she now serves in the Australian House of Representatives.

10 Christianne Boudreau is the mother of a young man who radicalized and was killed fighting with ISIS. She founded the Hayat Canada Family Support to help other families. Nicola Benyahya is also a mother impacted by ISIS. After her son died, she began Families for Life to help families through the counter radicalization process.

11 The Quilliam group is the first counter-extremism organization. Through pluralism and inspiring change, they work to combat extremism around the world, tackling extremism of all kinds.

Most of our interviewees believed that stressors such as insecurity, perceived injustices, religious or ethnic discrimination, torture, need for belonging, isolation, violence, sexual harassment, and other social grievances were all possible contributing factors to an individual's path to radicalization. Haras Rafiq explained that there tends to be "some form of grievance, whether it be genuine, partial or perceived" that contributes to the radicalization process.¹² Additionally, these experts agreed that each individual undergoing extremist change had unique personal reasons for their choice, making them distinct from all others. As Dr. Alexandra Bain, director of Hayat Canada Family Support Foundation, describes, "it is many different factors coming together in a 'perfect storm'."¹³

What struck us most forcefully from these interviews was although many provided us with tremendous insight regarding general trends of radicalization and deradicalization, they did not focus on the gender dimensions of radicalization. There is a definitive gap in not only the literature, but in our interviewees' responses, where the effect of gender variables on the production of foreign fighters is not being considered. Thus, the study of gender-related terrorist elements may hold not only academic value, but also value for deradicalization professionals. Our review of such studies uncovered four mechanisms through which gender and violence interact, particularly with regard to foreign fighters in ISIS.

Theoretical Framework

Mechanism 1: Boot Camp Theory

The emerging idea of Boot Camp Theory is an important aspect regarding how the treatment of women relates to the production of foreign fighters. Theoretically, if a country accepts violence against women in the home, that country is more likely to experience political violence and extremism. Studies note that many radicalized individuals have a past history of domestic violence and crimes against women.¹⁴ Personal and witnessed violence from childhood to adulthood can rewire brain networks which then lead to a change in behavior, emotion, and cognition.¹⁵

For children, domestic violence in the home can alter their development and influence how they perceive interpersonal and community violence.¹⁶ In fact, childhood domestic trauma can be more predictive of a desire to accept or seek out violence than the experience of war.¹⁷

¹² Haras Rafiq, "Personal Interview", Interview by Kayla McGill & Wiam Ayachi, March 2018.

¹³ Alexandra Bain, "Personal Interview", Interview by Wiam Ayachi & Emiley Pagrabs, March 2018.

¹⁴ Sarwar Bari, "Violence against Women and Terrorism," *The Express Tribune*, March 08, 2017; Hadley Freeman, "What Do Many Lone Attackers Have in Common? Domestic Violence," *The Guardian*, March 28, 2017.

¹⁵ Tobias Hecker, Simon Fetz, Herbert Ainamani, and Thomas Elbert, "The Cycle of Violence: Associations Between Exposure to Violence, Trauma-Related Symptoms and Aggression-Findings from Congolese Refugees in Uganda," *Journal of Traumatic Stress* 28, no. 5 (October 2015): 449.

¹⁶ Corina Nandi, Thomas Elbert, Manassé Bambonye, Roland Weierstall, Manfred Reichert, and Anja Zeller, "Predicting Domestic and Community Violence by Soldiers Living in a Conflict Region," *Psychological Trauma: Theory, Research, Practice, and Policy* 9, no. 6 (March 2017): 664.

¹⁷ Ibid, 668.

In this way, the terroristic treatment of women in the home through practices such as domestic violence and oppression becomes a “boot camp” training people for terrorism beyond the home.

Mechanism 2: Structural Goads

Structural Goads create grievances that push people into radicalization. Grievances often come in the form of cultural and gender norms. For example, many societies require men to marry in order to achieve full adult status. In societies where marriage and belonging are hindered by brideprice, polygyny, and skewed sex ratios, these young men become aggrieved and are easy targets for radicalization.

Brideprice is a key structural goad because it is an important cultural phenomenon that is subject to dramatic inflation, forcing many young men out of the marriage market.¹⁸ Polygyny further exacerbates the problem because when a man marries multiple women, other men are unable to find a wife. These wife-less men are likely the poorest in society with few options available to them for social progression, often increasing susceptibility to recruitment into terrorist groups.¹⁹ ²⁰ Societal son preference is another powerful structural factor. In many societies, a son is valued over a daughter for a variety of reasons, including the norm for sons to pass on the family name and property and provide for the family.²¹ In such cultures, girls become dispensable, which may lead to femicide, female infanticide, or sex-selective abortions, resulting in skewed sex ratios favoring males.²² When countries have unequal sex ratios favoring men, a surplus population of single males exists. Because unmarried men are more prone to

Mechanism 3: Brotherhood/Fraternity

The desire for brotherhood is well-documented as a persuasive factor in radicalization, particularly in young adult males.²³ The historical social division between the sexes wherein women are subordinate to men, primes young men towards fraternal subcultures. In societies where the ability to achieve belonging through family and marriage is difficult, young men replace the family they cannot have with fraternity and brotherhood. This has been observed among single, unaccompanied male refugees fleeing to Europe in recent years.²⁴ ²⁵ ²⁶

¹⁸ Valerie M. Hudson and Hilary Matfess, “In Plain Sight: The Neglected Linkage between Brideprice and Violent Conflict,” *International Security*, Vol. 42, no. 1 (Summer 2017), 9.

¹⁹ Valerie Hudson and Rose McDermott, “Why Polygamy Is Bad for National Security,” *POLITICO Magazine*, July 16, 2015.

²⁰ Ibid.

²¹ Valerie Hudson and Andrea Den Boer, “When a Boy’s Life Is Worth More Than His Sister’s,” *Foreign Policy*, August 04, 2015.

²² “Dad Wanted Boy, Abandons Baby Girls,” *DeseretNews.com*, January 17, 1999 ; Carl Gierstorfer, “While India’s Girls Are Aborted, Brides Are Wanted,” *CNN*, September 04, 2014.

²³ Anne Speckhard, “Understanding the Psycho-Social and Political Processes Involved in Ideological Support for Terrorism,” *Suicide Bombers: The Psychological, Religious & Other Imperatives* 41, no. 1 (2008.): 125.

²⁴ Peggy Reeves Sanday, *Fraternity Gang Rape: sex, brotherhood, and privilege on campus*, 2nd ed (New York: New York University Press, 2007).

²⁵ Anne Speckhard, “Understanding the Psycho-Social and Political Processes Involved in Ideological Support for Terrorism,” *Suicide Bombers: The Psychological, Religious & Other Imperatives* 41, no. 1 (2008.): 125.

²⁶ A Pew Research Center study found that asylum seekers of non-European origins are predominately young men. Of all refugees, 19% are men aged 0-17 and 42% are men aged 18-34. Phillip Connor, “Asylum seeker demography: Young and Male”, *Pew Research Center*, August 2, 2016.

minal activities than married men, societies with "extremely skewed sex ratios are more unstable, even without jihadi ideologues."^{27 28}

Brideprice, polygyny, and son preference are examples of the many structural factors that create grievances, and in turn push a population of young men toward radicalization. ISIS capitalizes on these grievances as an effective recruitment tool by paying the brideprice or offering wives to aggrieved young men.^{29 30 31} These men often create fraternal organizations wherein "crimes [committed by these groups] such as rape and sexual harassment become more common."³²

In these groups, members are willing to fight and die for their brothers and the use of collective violence to obtain desired ends is encouraged. This type of violence is different from domestic violence because it breeds and feeds upon itself to "protect" the brotherhood from outsiders or people who would challenge the fraternity.³³ For decades, the U.S. Armed Forces was an ideal example of a fraternal subculture.³⁴ The integration of women into the military threatened the existing bonds of fraternity and led to increased violence and oppression towards women, with rape and sexual assault used as a tactic to push women back into their perceived traditional subordinate role.³⁵

This desire for fraternity, while natural among young men, is highly exploitable by those who recruit for radical groups.³⁶ Extremist terrorist organization such as ISIS use the idea of brotherhood and a fraternal bond to draw men into their ranks. They even justify rape such as in cases like the Yazidi women who were symbolically subjugated through sexual violence.³⁷ ISIS thus builds a fraternity in which men feel power and women are restricted by using the bonds of brotherhood as incentive for recruits. This fraternal experience lowers personal barriers against engaging in collective violence on behalf of one's brothers.

Mechanism 4: Disempowerment of Women

Disempowering women in a society appears to be a contributing factor in radicalization. Research has shown that when women are empowered to

27 Valerie M. Hudson and Andrea de Boer, "Bare Branches and Security in Asia", *Harvard Asia Pacific Review* 9, no. 1 (2007): 20.

28 Valerie Hudson, "Europe's Man Problem: Migrants to Europe skew heavily male - and that's dangerous," *Politico Magazine*, January 5, 2016.

29 Hudson and Matfess, "In Plain Sight", 9.

30 Rukmini Callimachi, "ISIS Enshrines a Theology of Rape," *New York Times*, August 13, 2015.

31 Kenneth Roth, "Slavery: The ISIS Rules," *Human Rights Watch*, March 18, 2016; Callimachi, "ISIS Enshrines a Theology of Rape."

32 Hudson, "Europe's Man Problem."

33 Ray Harris, "The blood brotherhoods: A developmental look at terrorism from the perspective of mythos," *Journal Of Adult Development* 14, no. 3-4 (2007): 118.

34 "How Roles Have Changed for Women in the Military," *Norwich Online Graduate Degrees*, July 2016.

35 Susan Brownmiller, *Against Our Will: Men, Women, and Rape*, 1st Ballantine Books ed., (New York: Fawcett Columbine, 1993).

36 Speckhard, "Understanding the Psycho-Social and Political Processes Involved in Ideological Support for Terrorism."

37 Simon Tomlinson, "The Former ISIS Sex Slaves Waging War on Their Abusers: Hundreds of Yazidi Women Form an All-female Battalion Called the 'Sun Ladies' to Launch Massive Assault on Mosul," *Daily Mail Online*, February 09, 2016.

participate in decision making, society flourishes.^{38 39} Decision making groups incorporating women are often more successful in solving difficult challenges than groups of only men. Women are more risk averse in decision making, tending to be less extreme in their behavioral preferences.⁴⁰ Choices that make their children disposable, or deemed “collateral damage,” are not favored by mothers because, as givers of life, they recognize the impact of its loss.⁴¹ Conversely, when women are not empowered to participate, these beneficial influences are precluded. Men tend to make riskier decisions, as well as decisions that favor men over women.⁴²

Women's disempowerment at the household and national level facilitates radicalization by muting the very voices that might most effectively prevent it. The United States Institute of Peace (USIP) explains that women are some of the more powerful voices preventing radicalization in homes and schools.⁴³ Due to the success of their pilot program “Women Preventing Extremist Violence,” which empowered women in Nigeria and India to speak out against violent extremism in their communities, USIP's Gender and Peacebuilding team created a toolkit to enable any community to build on this gendered aspect of radicalization prevention.^{44 45}

Given these findings, it is not surprising that women's disempowerment, both as members of and in territories controlled by ISIS, is pervasive.⁴⁶ ISIS fosters a predominantly patriarchal and gender-conservative society, limits women's mobility and freedom, and excludes women from any decision making role.^{47 48 49} Their ideology includes rape, forced marriages, enslavement, social isolation, strict dress codes, and restrictions on mobility.⁵⁰ Women recruited by ISIS typically lead strictly domestic lives and are subject to men's desires.⁵¹ “ISIS's brutal practices reflect an ideology that devalues women and girls and call for their oppression,”

38 Therese Huston, “Are Women Better Decision Makers?” *The New York Times*, October 17, 2014 ; Judith H. Dobrzynski, “Maybe the Meltdown's a Guy Thing,” *The New York Times*, November 16, 2008.

39 Anita Woolley, Thomas Malone, and Christopher Chabris, “Opinion: Why Some Teams Are Smarter Than Others,” *The New York Times*. December 21, 2017.

40 Dobrzynski, “Maybe the Meltdown's a Guy Thing.”

41 Sara Reddick, “The rationality of care,” in *Women, militarism, and war: Essays in history, politics, and social theory*, Jean Elshtain and Shelia Tobias, eds. (Savage, MD: Rowman & Littlefield Publishers, Inc, 1990).

42 Dobrzynski, “Maybe the Meltdown's a Guy Thing.”

43 Georgia Holmer, “Resilience for Women Countering Violent Extremism,,” United States Institute of Peace, February 07, 2017.

44 “Women Preventing Extremist Violence,” United States Institute of Peace, January 23, 2017.

45 “Charting New Courses: Women Preventing Violent Extremism,” United States Institute for Peace, 2015, 3.

46 Jennifer Philippa Eggert, “Women in the Islamic State: Tactical Advantage Trumps Ideology,” IPI Global Observatory, August 21, 2017.

47 Ibid.

48 “ISIS's Persecution of Women,” Counter Extremism Project, July 13, 2017.

49 Some women in ISIS are given a degree of agency, such as the Khansaa Brigade. However, even these women are confined to the role of moral authority in the women's sphere. Lucy Kafanov, “How All-Female ISIS Morality Police ‘Khansaa Brigade’ Terrorized Mosul,” *NBC News*, November 20, 2016, <https://www.nbcnews.com/storyline/isis-uncovered/how-all-female-isis-morality-police-khansaa-brigade-terrorized-mosul-n685926>.

50 Ibid.

51 Eggert, “Women in the Islamic State: Tactical Advantage Trumps Ideology.”

thus silencing the very voices that might undermine their extremist view.

Research Design

These four mechanisms of the Boot Camp Theory, the creation of Structural Goads, the desire for Brotherhood/Fraternity, and the Disempowerment of Women, suggest a research design investigating the connection between gender and foreign fighters at the macro and micro levels of analysis. At these levels, we sought to test the following hypotheses drawn from the four mechanisms:

1. *Cultures and societies that accept violence against women are more likely to produce foreign fighters.*
2. *When structural goads within a society are present, individuals will be incentivized to join groups that can provide a more promising future.*
3. *When individuals lack the means to create healthy brotherhood ties and a sense of belonging in their home society, they seek to fulfill that fraternal need through fraternal groups.*
4. *When a society disempowers women, it is more likely to produce foreign fighters.*

First, we examined whether overall empirical connection between the four mechanisms is associated with the rate of foreign fighter production at the nation-state level of analysis. Second, we focused on specific case studies that could illuminate the four mechanisms at work in the radicalization of individuals. Our research design was implemented using mixed methods research. In this project, we used aggregate statistical testing to probe whether the hypotheses had validity, followed by careful case study investigation and expert interviews in a process-tracing effort.

Aggregate Statistical Analysis

Our hypothesis is that Foreign Fighter Production (FFP) will be significantly associated with measures of women's disempowerment and insecurity. This necessitated creation of a three-component database: 1) the dependent variable FFP, 2) key measures of women's disempowerment and insecurity, and 3) appropriate and pertinent control variables. Using this database we conducted statistical analysis using XLSTAT and STATA. We adopted as our standards of statistical significance a p value ≤ 0.10 , given the uncertainties in the FFP dependent variable.

Variables

see appendix for full variable descriptions

Foreign Fighter Production. FFP is our primary dependent variable and measures the rate at which people from one country left to fight for ISIS in a different country. We originally used data on 66 countries from the Soufan Group in their 2015 report and triangulated with expert sources to create an expanded 80-Country

Soufan-Plus Database.⁵²

Women's Disempowerment and Insecurity. We measured women's disempowerment and insecurity by using scaled ordinal variables from the WomanStats Database, the Gender Gap Index, and the Gender Inequality Index.^{53 54 55}

Control Variables. For multivariate modeling purposes, we assembled a list of five control variables that might provide alternative hypotheses for the difference in FFP apart from the variables on women's disempowerment and insecurity, such as level of wealth, level of democracy, and other pertinent measures. Data on these control variables is gathered from the World Bank, the PolityIV Project and the work of Alesina et al.⁵⁶

Exploratory Analysis

see appendix for full bivariate statistical results

The first statistical analysis was exploratory in nature, examining the bivariate relationship between measures of women's disempowerment and insecurity and our FFP variable. Seven measures were significantly correlated with FFP at the $p \leq 0.10$ level. We determined a significant relationship between FFP and brideprice, domestic violence, physical security of women, societal sanction for the murder of women (femicide), property rights in law and practice (trichotomy), property rights practice, and the patrilineality/fraternity syndrome scales.

These results proved encouraging for hypotheses 1, 2, and 4, examining violence against women, the presence of structural goods, and women's disempowerment respectively. These results are in line with our qualitative research (discussed below) but are insufficient without multivariate modeling.

Multivariate Regressions

The next step in our country-level analysis was to run multivariate regressions, controlling for urbanization, unemployment, GDP per capita, religious fractionalization, and regime type.⁵⁷ By including these variables, we hoped to account for other explanations of FFP. We checked the intercorrelations of the independent and control variables, and found no multicollinearity, so we moved

52 "FOREIGN FIGHTERS: An Updated Assessment of the Flow of Foreign Fighters into Syria and Iraq," The Soufan Group, December 2005.

53 "WomanStats Project," WomanStats Project, accessed February 23, 2018, <http://www.womanstats.org>.

54 "The Global Gender Gap Report: 2017," World Economic Forum, 2017.

55 "Gender Inequality Index," United Nations Development Programme: Human Development Reports, 2017.

56 Alberto Alesina, Arnaud Devleeschauwer, William Easterly, Sergio Kurlat, Romain Wacziarg, "Fractionalization," *Journal of Economic Growth* 8 (2003).

57 See Appendix for full information on all variables.

forward with the multivariate regressions. Table 1 presents the results.

Table 1

Gender & Foreign Fighters				
Dependent Variable: Production of Foreign Fighters				
	Model 1	Model 2	Model 3	Model 4
GDP per capita (log)	0.525 (29738.674)	0.504 (7633.696)	0.509 (7519.771)	0.975 (8095.149)
% Unemployed	0.161 (416.546)	0.46 (398.271)	0.214 (399.891)	0.238 (390.798)
% Urbanization	0.032** (150.888)	0.024** (150.044)	0.058* (152.104)	0.045** (148.423)
Polity IV	0.934 (2003.61)	0.569 (1685.947)	0.673 (1697.474)	0.536 (2017.114)
Religious Fractionalization	0.529 (9890.317)	0.823 (9791.766)	0.385 (10012.458)	0.447 (9682.161)
Brideprice	0.071* (863.054)			
Societal Sanction for Murder		0.062* (4316.692)		
Property Rights Law & Practice (Trichotomy)			0.038** (3438.476)	
Patrilineality/Syndrome Scale				0.012** (773.903)
Constant	-7616.849	-11520.578	-5981.395	-32577.341
Number	77	77	77	77
R-Squared	0.07	0.073	0.084	0.11
Std. errors in ()	*p < .10 **p < 0.05 ***p < 0.01			

While the overall r-squares for these models are fairly low, we find five variables consistently significant in explaining variance in FFP: urbanization and four measures of women's disempowerment and insecurity, specifically brideprice, societal sanction for the murder of women (femicide), property rights in law and practice (trichotomy), and the patrilineality/fraternal syndrome scale. Interestingly, the societal sanction for the murder of women (femicide) supports the first mechanism, the Boot Camp Theory. Brideprice supports the second mechanism, Structural Goods. The patrilineality/fraternity syndrome scale supports the third mechanism, Brotherhood/Fraternity. Property rights in law and practice (trichotomy) supports the fourth mechanism, Disempowerment of Women. These findings corroborate our hypotheses that Foreign Fighter Production is related to women's disempowerment, violence against women,

and structural goods caused by gender practices in a country.

Aggregate statistical testing is vital for establishing face validity of a relationship, but is not sufficient to understand the processes at work. For that reason, this research design has an additional qualitative component in which we examine particular cases of radicalization to uncover those processes and their congruity with our hypotheses. These case studies also allow us to probe our third hypothesis concerning a yearning for fraternity, a variable which cannot be captured in our aggregate testing.

Case Studies

Methodology

Using the 80 nations from our Soufan-Plus Database we built a database for the comparison of gender variables found in the personal lives of individual foreign fighters. The database was stratified to include additional cases from countries with a greater production of foreign fighters. While we recognize that there are numerous terrorist groups, we delimited our study to those traveling to fight for ISIS, compiling a total of 118 cases.

In searching for individual foreign fighters, we began with the profiles found on the Counter Extremism Project's Terrorist and Extremist Database.⁵⁸ These profiles led us to other open sources in both English and foreign language news. As each potential case was assigned a name, we ran a short "viability check" by quickly assembling the information located on each fighter. Those cases where minimal biographical information was available were discarded. After checking the viability of each case, we researched each name thoroughly and populated our database with the records of numerous gender-related variables. At the end of this process, we had 32 complete case studies. We coded for 34 gender-related variables, as well as 30 general biographical variables. Of these variables, several appeared in numerous case studies, providing real world examples to support the findings of our statistical analysis.

Boot Camp Theory	<ul style="list-style-type: none"> • Domestic Violence Law • Societal Sanction for the Murder of Women/Femicide • Women's Physical Security
Structural Goads	<ul style="list-style-type: none"> • Brideprice • Child Marriage • Polygyny • Son Preference
Brotherhood/Fraternity	<ul style="list-style-type: none"> • Patrilineality/Fraternity Syndrome • Gender Inequality Index • Global Gender Gap Index
Disempowerment of Women	<ul style="list-style-type: none"> • Women's Property Rights • Inequity in Family Law • Life Expectancy of Women • Prevalence of Patrilocal Marriage • Women's Mobility

⁵⁸ "Terrorists and Extremists Database," Terrorists and Extremists Database (TED): Counter Extremism Project.

To our knowledge this is the first time anyone has systematically inquire about these gender variables in relation to the radicalization of these individuals.

Boot Camp Theory

The Boot Camp Theory variables include physical violence and attitude toward women. For physical violence variables we coded for location (within the childhood home, marriage home, or other) as well as for participation (perpetrator, victim, or observer). Our cases involving physical violence range from Khaled Sharrouf of Australia who was physically abused by his father as a child, to Michael Delefortrie of Belgium who was convicted of domestic abuse.⁵⁹ Both of these men traveled to Syria to join ISIS and were involved in combat.⁶⁰

The attitude toward women variable was specific to documented changes in treatment of women or statements about women. Much of the information for this variable was gathered from publicized interviews with family and friends of foreign fighters. The ex-wife of Abdirahmaan Muhumed, a Somali-born foreign fighter, recounted in an interview how her husband's attitude toward her changed as he radicalized. Not only did Muhumed want her to change the way she dressed and behaved, but he also wanted to take a second wife. She refused and divorced him before he left for Syria.⁶¹ The case of Islam Yakin of Egypt is even more evident. A girl-crazed bodybuilder, Yakin's attitude toward women changed so significantly post-radicalization that he removed all women from his Facebook page.⁶² Yakin's friends recalled his unwillingness to even walk behind a woman on the street, speeding up his gait to move ahead so he would not be forced to look at her.⁶³ These stories are just a few of the numerous examples found in the case study dataset. In fact, 59 percent of all cases studied gave evidence of the Boot Camp variables.

Structural Goads

Marriage status was an interesting variable relating to Structural Goads. When evaluating marriage we coded whether the fighter was married or not, and then looked for additional variables such as age of marriage, difficulty in finding a spouse, and arranged marriages. Most of the fighters we researched were married, with 38 percent only finding a spouse through connections made after radicalization. Consider the case of Mark Taylor of New Zealand. His quest for marriage, while not

⁵⁹ Ben Collins, "The Story behind Australia's Most Notorious Militant," BBC News, June 24, 2015; "Horrible Truth About ISIS; Terrorism Behind the Masks; Troubled Young Generation in Danger of Being Brainwashed," CNN Transcripts, March 31, 2017.

⁶⁰ "Khaled Sharrouf," Counter Extremism Project, January 18, 2017.

⁶¹ Kathryn Skelton, "'These Are Not Muslims; They're Monsters'," Lewiston Sun Journal, September 20, 2014.

⁶² Mona El-Naggar, "From a Private School in Cairo to ISIS Killing Fields in Syria (With Video)," The New York Times, February 18, 2015.

⁶³ Ibid.

particularly successful, was a key element in his becoming a foreign fighter.

At first, after garnering the attention of authorities upon his attempts to join al-Qaeda in Pakistan, Taylor claimed he was not a terrorist, rather he was just trying to find a Muslim wife.⁶⁴ Later, upon his arrival in Syria, Taylor used an online dating site for Muslims in an attempt to attract a bride who would share his extremist tendencies and be willing to join him in Raqqa.⁶⁵ His profile has been taken off the website, and there is no indication of Taylor's marital success. The Structural Goads was one of the most significant mechanisms found in the case studies, appearing in 84 percent of the cases.

Fraternity

We examined numerous gender variables relating to Fraternity. Two of the most intriguing are isolation and brotherhood desire. When coding for isolation, we looked for evidence, usually found anecdotally through interviews with family and friends, that the foreign fighter was isolated from peer groups or had a reputation as a loner. The desire for brotherhood was identified by examining attempts to connect with a group (often expressed in joining a gang or other unsavory organization), and expressions of a desire for belonging. In the case of Mārtiņš Grīnbergs of Latvia, both variables were present. Grīnbergs had no real friends until he met a radicalized young man from Finland online. Their friendship birthed a romanticized view of ISIS, and Grīnbergs left for Syria with a desire to join the terrorist brotherhood.⁶⁶ Throughout the case study dataset, fraternity features prominently, appearing in 84 percent of the cases.

Disempowerment of Women

The presence or absence of a mother in the home was one of the more significant gender-related variables in our case studies. To code for presence or absence of a mother, we looked at information about the childhood of foreign fighters, as well as examining news articles that quoted mothers of fighters. Both fighters with and without mothers in the home became radicalized, and we found that the impact of a mother's (or mother figure's) influence was an important factor. For example, Tashfeen Malik of Pakistan had an absent mother and spent most of her formative years alongside her father and several siblings in Saudi Arabia, only returning to her mother's home in Pakistan to pursue a degree in Pharmacology.⁶⁷ In the absence of her mother's influence, Malik was radicalized at a school for young women, founded by self-proclaimed "Islamic feminist," Farhat Hashmi.⁶⁸ She eventually met her husband, Syed Farook, online.⁶⁹

64 Matthew Theunissen and Derek Cheng, "I'm No Terrorist, I Just Wanted a Wife," NZ Herald. September 12, 2011.

65 Johnson Stephen, "'I Need a Righteous Muslim Lady Who Wants to Move Here ': New Zealand Jihadist Fighting with ISIS in Syria Is Looking for Love on Islamic Dating Site," Daily Mail Online: Australia, May 02, 2017.

66 Linda Sloka, "«De Facto»: Mārtiņa Ceļš No Lauku Puiša Līdz Iespējamam Džihādistam Sīrijā." Raksts: LSM.LV, September 18, 2016.

67 Coleen Curry, "Inside the Lives of the Women in the San Bernardino Shooting Investigation," Women in the World, February 07, 2017.

68 Dana Kennedy, "Did an 'Islamic Feminist' Scholar Inspire Tashfeen Malik?" The Daily Beast, December 07, 2015.

69 Christopher Goffard, "They Met Online, Built a Life in San Bernardino - and Silently Planned a Massacre," Los Angeles Times, December 5, 2015.

Both husband and wife were killed in their infamous attack on coworkers in San Bernardino.⁷⁰ This final mechanism appeared in over half of the cases, with 58 percent of the individuals having experience with the disempowerment of women.

Case Study Discussion

Analysis of the case studies revealed trends relating to all four of the mechanisms. Every single case in our dataset evidenced at least one mechanism, while many showed indicators of more than one. This supports the findings of our statistical analysis and further shows the four mechanisms at play at the micro level.

Conclusion

In order to examine the relationship between gender and the production of foreign fighters, we conducted macro-level statistical analysis and determined there is a significant relationship. We then focused on micro-level analysis by examining individual case studies and found trends that support our statistical findings.⁷¹ If FFP is an important phenomenon of concern to the international system, then our primary recommendation concerns the need for additional data. First, we recommend significant resources be committed to an upgrading of FFP figures. For example, the most reliable figures are from Western nations, but we know that Western nations are not, in fact, the primary sources of FFP. In addition to more accurate numbers of foreign fighters, details such as the fighters' birth countries, when they radicalized, when they moved to their secondary country, and especially gender variables in that individuals life would further highlight the relationship between gender variables and foreign fighter production and give much needed insight into individual paths to radicalization. These variables need to be included in the psychological profiles of individual terrorists and foreign fighters. It is clear that most people who research and collect this data have narrow assumptions about what is important and vital regarding individual radicalization processes.

Looking at foreign fighter production through a gendered lens informs new recommendations for policy makers. Although many of these recommendations are time intensive and evolutionary in nature, effort and attention must be given to ensure positive change. Domestic violence, a key component of the Boot Camp Theory, builds a foundation for further brutality. Therefore, more efforts must be made to treat domestic violence as the serious crime it is. Countering Structural Goads can be achieved by reducing rates of polygyny and brideprice, correcting skewed sex ratios derived from cultural son preference, and combating gendered societal roles. Fraternal subcultures fostering collective violence - based on an 'us vs. them' mentality - can be broken down by

⁷⁰ Ibid.

⁷¹ See Appendix for case study trends.

incorporating disenfranchised young men and women into society. Finally, governments must increase efforts to empower women's voices in homes and communities to combat violent extremism and radical ideologies. Our research demonstrates that we must widen our horizons and include the important gender dimensions of radicalization to successfully address and combat the threat of terrorism. Though the relationship between gender and radicalization is only beginning to be explored, we hope our research has provided an empirical foundation for future studies, as well as insight into gender-informed policies likely to be more effective in tackling violent extremism.

Appendix

Interview Appendix

Interviewees

Name	
Dr. Anne Aly	Member of Australian Parliament and founder of <i>People Against Violent Extremism</i>
Dr. Alexandra Bain	Director of <i>Hayat Canada Family Support</i> ; Professor at St Thomas University
Nicola Benyahya	Mother of a Foreign Fighter
Christiane Boudreau	Mother of a Foreign Fighter
Dr. Alexis L. Henshaw	Visiting Assistant Professor at Duke University
Richard Mac Namee	Associate Professor at Texas A&M University Bush School of Government and Public Service
Haras Rafiq	Chief Executive Officer at Quilliam
Mustafa Tameez	Founder and Managing Director of <i>Outreach Strategists</i>

Interview Questionnaire

- 1) What are the various paths to radicalization? Please be as detailed as possible.
- 2) Do the paths to radicalization differ between males and females?
- 3) What is the linkage between radicalization and violence? Does radicalization always entail violence, or are there additional factors that may catalyze violence in addition to radicalization?
- 4) What role do gender norms play in radicalization? In violence that results from radicalization?
- 5) What are the various paths to deradicalization? Please be as detailed as possible.
- 6) Are the paths of deradicalization different for males and females?
- 7) Is it easier or harder to radicalize men with daughters vs men with sons?

***IRB Exemption granted for this research**

COUNTRY-LEVEL AGGREGATE STATISTICAL ANALYSIS APPENDIX

Independent Variable Descriptions

Women's Disempowerment & Insecurity We used variables measuring women's disempowerment and insecurity by using both more specific and more general measures.

Boot Camp Theory	<ul style="list-style-type: none">• Domestic Violence Law• Societal Sanction for the Murder of Women/Femicide• Women's Physical Security
Structural Goads	<ul style="list-style-type: none">• Brideprice• Child Marriage• Polygyny• Son Preference
Brotherhood/Fraternity	<ul style="list-style-type: none">• Patrilineality/Fraternity Syndrome• Gender Inequality Index• Global Gender Gap Index
Disempowerment of Women	<ul style="list-style-type: none">• Women's Property Rights• Inequity in Family Law• Life Expectancy of Women• Prevalence of Patrilocal Marriage• Women's Mobility

First, we used scaled variables from the WomanStats Database. The WomanStats Database covers the situation of women in 176 countries in a wide variety of variables. From the WomanStats Database we compiled many ordinal scale variables. The variables are explained in greater detail below.

Boot Camp Theory Mechanism

- Overall Adequacy of Domestic Violence Law (2017) examines the penal code to gain a "holistic picture of the adequacy of domestic violence law in terms of comprehensiveness, the reasonable of evidence required, and the penalties and protections afforded."¹ The scale ranges from 0 (adequate domestic violence laws) to 7 (no laws against domestic violence).
- Societal Sanction for the Murder of Women/Femicide (2016) measures the "sanction of or pressure for female killing in a society" or cultural traditions practiced such as honor killings, dowry deaths, acid attacks, etc.² The scale ranges from 0 (no evidence of practices that condone femicide) to 2 (substantial evidence of practices that condone femicide).
- Women's Physical Security (2014) examines domestic violence, rape and sexual assault, marital rape, murder of women, suicide practice, and honor

¹ "Codebook: DV-SCALE-5," The WomanStats Project, accessed April 18, 2018, <http://www.womanstats.org/new/codebook/>

² "Codebook: MURDER-SCALE-1," The WomanStats Project, accessed April 18, 2018, <http://www.womanstats.org/new/codebook/>

killings/femicide.³ This is a scale from 0 (laws and practices for women's physical security are enforced) to 4 (laws and practices for women's physical security are non-existent or weak).

Societal Goods Mechanism

- Brideprice/Dowry/Wedding Costs (2016) examines if the practice of giving a brideprice or dowry is practiced in the majority of the country or not.⁴ This is a scale from 0 (neither brideprice or dowry - a marriage of equals) to 10 (the bride's family gives money/assets to the groom and/or his family, practice in a large majority of society).
- Child Marriage Law (2015) looks at the degree a nation's laws prohibit underage marriage (16 or younger).⁵ The scale is from 0 (underage marriage is illegal) to 2 (underage marriage is legal).
- Child Marriage Practice (2015) measures the prevalence of underage marriage (16 years or younger).⁶ The scale goes from 0 (less than 5% of girls are married underage) to 2 (10% of girls are married at age 16 or younger).
- Child Marriage Practice & Law (2015) adds the scores from Child Marriage Law and Practice to determine the overall picture of the "legal sanction and prevalence of underage marriage for girls in the nation."⁷ The scale ranges from 0 (illegal, less than 5% married at age 16 or younger) to 4 (legal, over 10% married at age 16 or younger)
- Son Preference and Sex Ratios (2015) examines the difference in sex ratios, especially sex ratios that favor sons.⁸ And societal preference for sons (i.e. lack of women at birth due to sex-selective abortions). The scale ranges from 0 (no son preference, no abnormality in sex ratios) to 4 (significant and large abnormalities in sex ratios at birth and early childhood).
- Prevalence and Legal Status of Polygyny (2016) measures the prevalence and legality of polygyny in a nation.⁹ The scales ranges from 0 (illegal and extremely rare <2% women in such a relationship) to 4 (legal under customary/religious law and is common >25% women in such a relationship).

3 "Codebook: MULTIVAR-SCALE-1," The WomanStats Project, accessed April 18, 2018, <http://www.womanstats.org/new/codebook/>

4 "Codebook: MARR-SCALE-1," The WomanStats Project, accessed April 18, 2018, <http://www.womanstats.org/new/codebook/>

5 "Codebook: AOM-SCALE-2," The WomanStats Project, accessed April 18, 2018, <http://www.womanstats.org/new/codebook/>

6 "Codebook: AOM-SCALE-1," The WomanStats Project, accessed April 18, 2018, <http://www.womanstats.org/new/codebook/>

7 "Codebook: AOM-SCALE-3," The WomanStats Project, accessed April 18, 2018, <http://www.womanstats.org/new/codebook/>

8 "Codebook: ISSA-SCALE-1," The WomanStats Project, accessed April 18, 2018, <http://www.womanstats.org/new/codebook/>

9 "Codebook: PW-SCALE-1," WomanStats Project, accessed April 18, 2018, <http://www.womanstats.org/new/codebook/>

Brotherhood/Fraternity Mechanism

- Patrilineality/Fraternity Syndrome (2017) measures the degree to which a country relies on the patrilineal/fraternal security provision mechanism within its society (i.e. societal acceptance for femicide/honor killings, age of marriage for girls, son preference, and rape exemption - among others).¹⁰ The scale ranges from 0 (the society does not encode the syndrome as its security provision mechanism) to 16 (the society fully encodes the syndrome as its security provision mechanism).

Disempowerment of Women Mechanism

- Property Rights Law (2017) measures “to what degrees codified law protects women’s property rights.”¹¹ ¹² This scale is from 0 (non-discriminatory laws, women inherit equally, and have equal access to land and rights) to 2 (discriminatory laws, women do not inherit or have equal access to land or rights).
- Property Rights Practice (2017) examines the practices of women’s property rights and how they are different or similar to laws.¹³ The scale is from 0 (non-discriminatory practices) to 2 (discriminatory practices).
- Property Rights Law & Practice (2017) shows a holistic look at women’s property rights in law and practice by adding the Property Rights Law and Property Rights Practice.¹⁴ This scale ranges from 0 (discriminatory) to 4 (non-discriminatory).
- Inequity in Family Law & Practice (2016) examines the inequity in family law by looking at marital rape, attitude towards divorce, abortion rights, and consent in marriage among other indicators.¹⁵ This scale ranges from 0 (equity) to 4 (inequity).
- Life Expectancy of Women (2015) ranks female life expectancy in a nation.¹⁶ The scale is from 0 (female life expectancy is greater than or equal to 79 years) to 4 (female life expectancy is less than or equal to 53 years).
- Difference in Life Expectancy of Women (2015) measures the difference between female and male life expectancy.¹⁷ The scale ranges from 0 (difference is between 9-12 years) to 2 (difference is between -1 and 3 years).

¹⁰ “Codebook: MULTIVAR-SCALE-6,” WomanStats Project, accessed April 18, 2018, <http://www.womanstats.org/new/codebook/>

¹¹ “Codebook: LO-SCALE-2,” WomanStats Project, accessed April 18, 2018, <http://www.womanstats.org/new/codebook/>

¹² Ibid.

¹³ “Codebook: LO-SCALE-1,” WomanStats Project, accessed April 18, 2018, <http://www.womanstats.org/new/codebook/>

¹⁴ “Codebook: LO-SCALE-3,” WomanStats Project, accessed April 18, 2018, <http://www.womanstats.org/new/codebook/>

¹⁵ “Codebook: MULTIVARIATE-SCALE-3,” WomanStats Project, accessed April 18, 2018, <http://www.womanstats.org/new/codebook/>

¹⁶ “Codebook: DACH-SCALE-1,” WomanStats Project, accessed April 18, 2018, <http://www.womanstats.org/new/codebook/>

¹⁷ “Codebook: DACH-SCALE-2,” WomanStats Project, accessed April 18, 2018, <http://www.womanstats.org/new/codebook/>

- Prevalence of Patrilocal Marriage (2016) measures how prevalent patrilocal marriage (when a woman is expected to live with her husband's family after marriage) is within a society.¹⁸ This is scaled from 0 (no expectation of living with either family) to 2 (strong presence of patrilocality - more than 20% of marriages are patrilocal, there is an expectation of living with the husband's family).
- Women's Mobility (2017) looks at the extent to which it is difficult for women to "be present and move about in public spaces (i.e. outside of her household)" depending on harassment outside the home, or family constraints (which could be supported by laws).¹⁹ The scale ranges from 0 (no legal restrictions on women's movements) to 4 (there are legal restrictions on women's movement and the law supports punishment from strangers or family members).

Other Non-WomanStats Gender Variables Examined

Brotherhood/Fraternity Mechanism

- From the World Economic Forum, we compiled the Global Gender Gap Index (GGI) which "reports benchmarks on 144 countries on their progress towards gender parity across four thematic dimensions."²⁰ Those thematic divisions are: economic participation and opportunity, educational attainment, health and survival, and political empowerment.²¹ The GGI is scored from 0-1 allowing interpretation as percentages.
- From UNDP, we compiled the Gender Inequality Index (GII) which examines 159 countries and "measures gender inequalities in three important aspects of human development - reproductive health...empowerment...and economic status."²² The GII is scored from 0-1 allowing interpretation as percentages.

Control Variables

For multivariate modeling purposes, we assembled a list of control variables that might account for the difference in FFP apart from the variables on women's disempowerment and insecurity. Data on these control variables was gathered from the World Bank, the PolityIV Project and the work of Alessandro Alesina and James Fearon on fractionalization.²³

¹⁸ "Codebook: MARR-SCALE-1," WomanStats Project, accessed April 18, 2018, <http://www.womanstats.org/new/codebook/>

¹⁹ "Codebook: IIP-SCALE-1," WomanStats Project, accessed April 18, 2018, <http://www.womanstats.org/new/codebook/>

²⁰ "The Global Gender Gap Report: 2017," World Economic Forum, 2017.

²¹ Ibid.

²² "Gender Inequality Index," United Nations Development Programme: Human Development Reports, 2017.

²³ Alberto Alesina, Arnaud Devleeschauwer, William Easterly, Sergio Kurlat, Romain Wacziarg, "Fractionalization," *Journal of Economic Growth* 8 (2003).

From the World Bank we gathered:

- The Population of every country in our database from 2016, measured in millions.²⁴ We controlled for population because we believe there could be a difference between larger populations and smaller populations in the methods of recruitment, and the treatment of women.
- The GDP per capita for every country in our database from 2016, measured in millions of USD.²⁵ We include GDP per capita because we assume that countries with a lower GDP would exhibit more poverty, leading to more prevalent desperation, creating greater opportunity for radicalization.
- Percent of the population that is unemployed as of 2017. This is the percent of the total labor force modeled ILO estimate.²⁶ We include Unemployment because we theorize people who are unemployed are more prone to boredom or economic grievances that could create avenues for radical groups to influence those individuals.
- Each country's Urban population, percent of the total population from 2016.²⁷ In countries with more urbanized populations, it can be theorized that there will be greater spread of radical ideologies through more internet use, ease of travel, ease of undetection when traveling.

We used the Quality of Governance (QoG) Standard Database to find information on fractionalization variables within a society from Alesina et al as cited in the the QoG Cross-Section Data.^{28 29}

- Religious fractionalization from 2014 (coded as al_religion in the QoG Standard Database), measuring the probability two random people will not belong to the same religious group, ranging from 0-1 (the higher the number the less probability of sharing that characteristic), allowing interpretation as percentages.³⁰

We also examined ethnic, cultural, and language fractionalizations but found that they were highly correlated with other variables, thus we chose to omit them.^{31 32 33} We used religious fractionalization because if more people in a country are prone to religious discrimination or an 'us vs. them' mentality, then there will be more intolerance and oppression. Creating a system ripe for radicalization.

²⁴ "Population, total," The World Bank: Data, last updated 2018, <https://data.worldbank.org/indicator/SP.POP.TOTL>

²⁵ "GDP, PPP," The World Bank: Data, last updated 2018, <https://data.worldbank.org/indicator/NY.GDP.MKTP.PP.CD>

²⁶ "Unemployment, total (% of total labor force) (modeled ILO estimate)," The World Bank: Data, last updated 2018, <https://data.worldbank.org/indicator/SL.UEM.TOTL.ZS>

²⁷ "Urban population: % of total," The World Bank: Data, last updated 2018, <https://data.worldbank.org/indicator/SP.URB.TOTL.IN.ZS?end=2016&start=2016>

²⁸ Alberto Alesina, Arnaud Devleeschauwer, William Easterly, Sergio Kurlat, Romain Wacziarg, "Fractionalization," *Journal of Economic Growth* 8 (2003).

²⁹ Jan Teorell, Stefan Dahlberg, Sören Holmberg, Bo Rothstein, Natalia Alvarado Pachon and Richard Svensson, "The Quality of Government Standard Dataset," University of Gothenburg: The Quality of Government Institute, January 2018, http://www.qogdata.pol.gu.se/data/aqog_std_jan18.pdf

³⁰ Ibid, 68.

³¹ Ibid, 280.

³² Ibid, 68.

³³ Ibid, 280.

Finally, in order to gauge regime-type effects, we used the PolityIV database from the Center for Systemic Peace Global Report from 2016.³⁴ The PolityIV measures the level of democracy or autocracy in countries with populations greater than 500,000. The countries are then scaled from 1 (full democracy) to 5 (autocracy) with 6 as failed/occupied countries in an ordinal scale. We include regime type because many studies show that democracies diminish grievances, and autocracies crack down on dissidents. Thus a more democratic society which empowers its people would be less likely to produce as many Foreign Fighters as an autocratic society which disempowers its people.

Statistical Bivariate Results

80-Country Significant Bivariate Results	
Variable	P-Value
The WomanStats Patrilineality/ Syndrome Scale	.018***
The WomanStats Brideprice Scale	.05**
The WomanStats Domestic Violence Scale	.09*
The WomanStats Physical Security of Women Scale	.082*
The WomanStats Societal Sanction of Murder Scale	.034**
The WomanStats Property Rights in Law & Practice (Trichotomy)	.02**
The WomanStats Property Rights Practice Scale	.10*

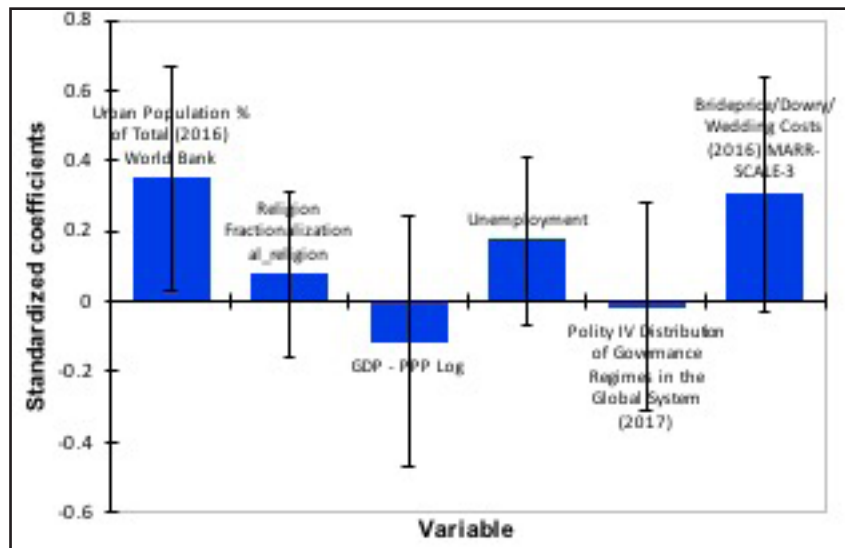
³⁴ "INSCR Data Page," Center for Systemic Peace, last updated 2017, <http://www.systemicpeace.org/inscrdata.html>

Multivariate Regressions

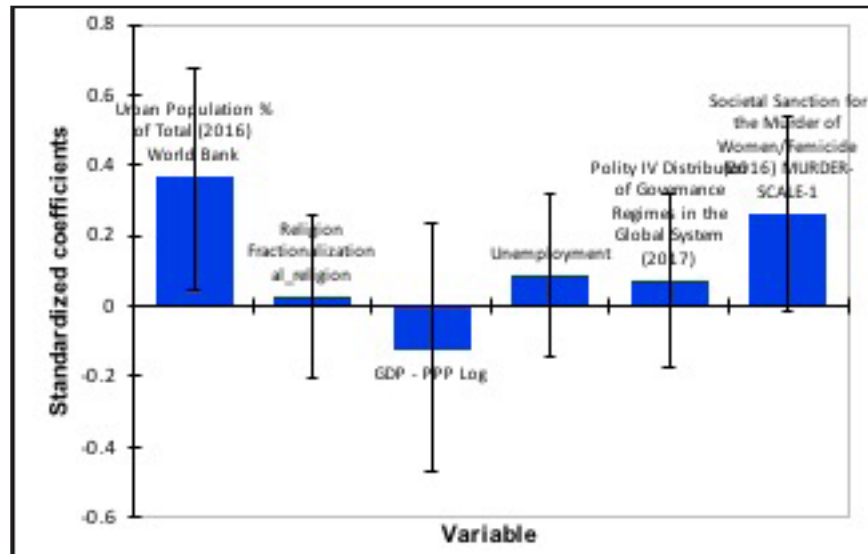
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
GDP per capita (log)	0.525 (29738.674)	0.504 (7633.696)	0.509 (7519.771)	0.975 (8095.149)	0.256 (7503.389)	0.311 (7546.641)	0.438 (7880.584)
% Unemployed	0.161 (416.546)	0.46 (398.271)	0.214 (399.891)	0.238 (390.798)	0.286 (415.002)	0.334 (403.493)	0.362 (401.919)
% Urbanization	0.032** (150.888)	0.024** (150.044)	0.058* (152.104)	0.045** (148.423)	0.035** (155.242)	0.031** (153.113)	0.026** (152.148)
Polity IV	0.934 (2003.61)	0.569 (1685.947)	0.673 (1697.474)	0.536 (2017.114)	0.688 (2108.216)	0.447 (1724.453)	0.856 (2062.136)0.767 (9902.712)
Religious Fractionalization	0.529 (9890.317)	0.823 (9791.766)	0.385 (10012.458)	0.447 (9682.161)	0.534 (10483.071)	0.592 (10025.971)	0.767 (9902.712)
Brideprice	0.071* (863.054)						
Societal Sanction for Murder		0.062* (4316.692)					
Property Rights Law & Practice (Trichotomy)			0.038** (3438.476)				
Patrilineality/Fraternity Syndrome Scale				0.012** (773.903)			
Adequacy of Domestic Violence Laws					0.367 (1342.267)		
Property Rights Practice						0.234 (5908.047)	
Women's Physical Security							0.194 (3534.191)
Constant	-7616.849	-11520.578	-5981.395	-32577.341	8220.924	539.39	-9968.608
Number	77	77	77	77	77	77	77
R-Squared	0.07	0.073	0.084	0.11	0.037	0.045	0.049
Std. errors in ()	*p < .10 **p < 0.05 ***p < 0.01						

Multivariate Models: Standardized Coefficient Graphs

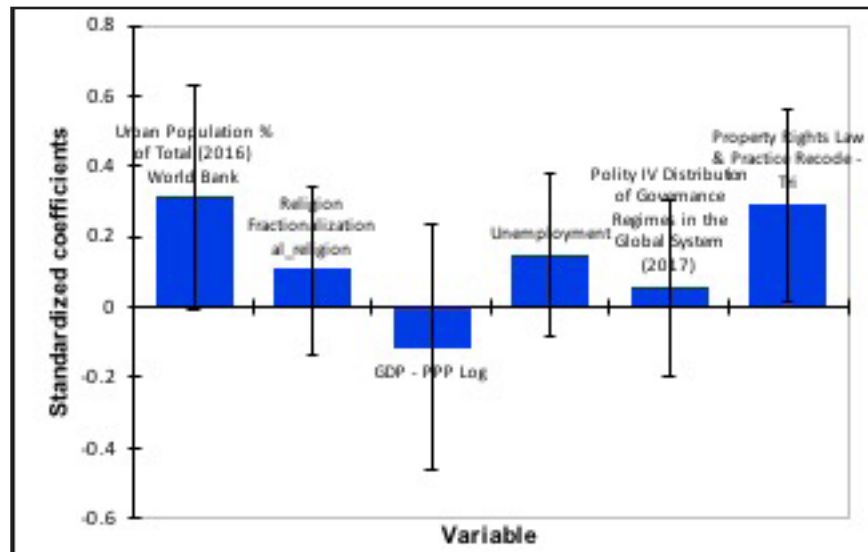
Model 1: Brideprice



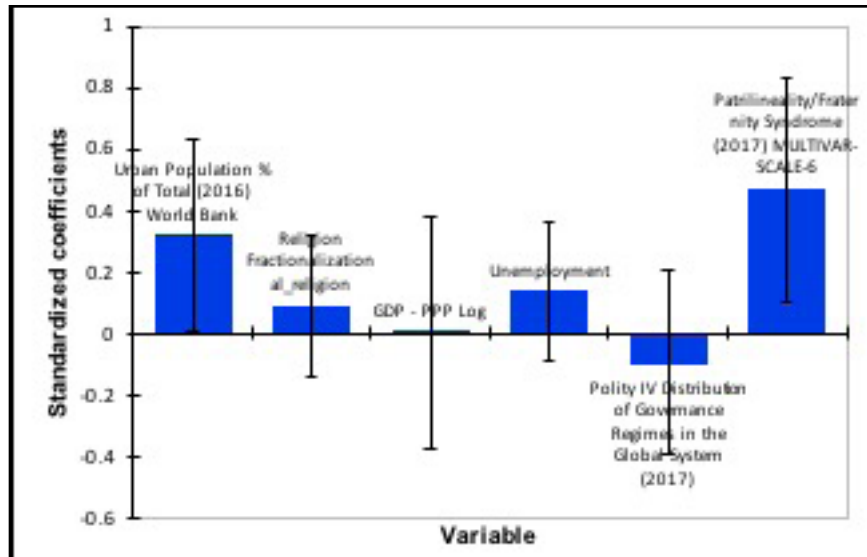
Model 2: Societal Sanction for Murder



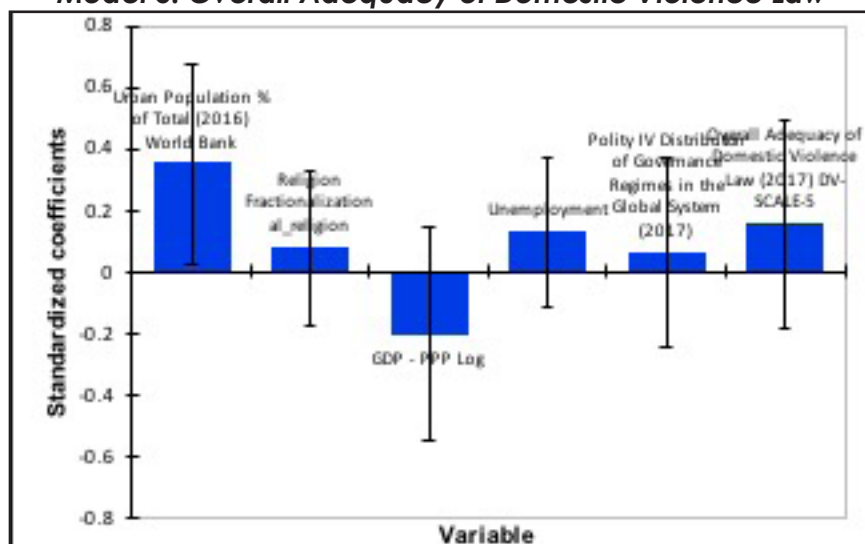
Model 3: Property Rights Law & Practice (Trichotomy)



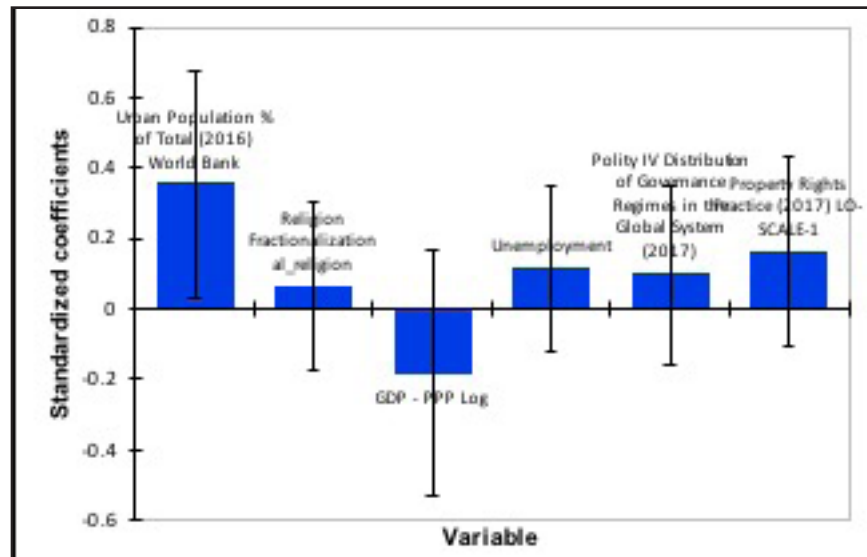
Model 4: Patrilineality/Fraternity Syndrome



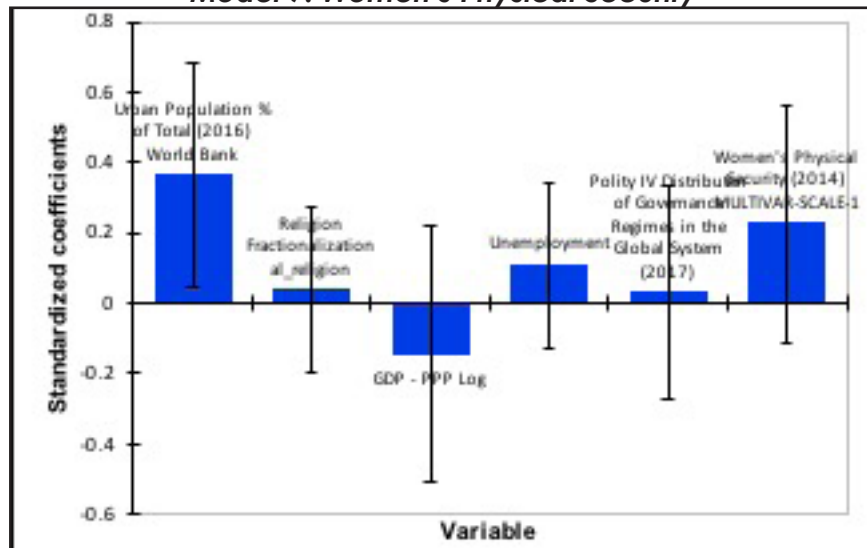
Model 5: Overall Adequacy of Domestic Violence Law



Model 6: Property Rights Practice



Model 7: Women's Physical Security



INDIVIDUAL-LEVEL CASE STUDY ANALYSIS APPENDIX

Variables from Case Studies

Boot Camp Theory	<ul style="list-style-type: none">• Physical Violence• Sexual Violence• Trafficking• Prostitution	<ul style="list-style-type: none">• Pornography• Attitude Towards Women• Attitude Towards Men
Structural Goads	<ul style="list-style-type: none">• Marriage Status• Brideprice• Dowry• Honor Concerns	<ul style="list-style-type: none">• Arranged Marriage• Marriage Difficulty• Number of Children in a Family
Fraternity	<ul style="list-style-type: none">• Father Absence• Father Radicalization• Brother Radicalization• Brotherhood/ Belonging Desire	<ul style="list-style-type: none">• Agency Desires• Radicalized Male Interaction• Isolation
Disempowerment of Women	<ul style="list-style-type: none">• Education• Mother Absence• Mother Radicalization• Sister Radicalization	<ul style="list-style-type: none">• Sisterhood Belonging/ Desire• Gender Related Trigger Event• Female Role Models• Male Role Models

Case Study Trends

- Boot Camp Theory - 59%
- Fraternity - 84%
- Structural Goads - 84%
- Disempowerment of Women - 58%

