

## **Grievances and Role Differentiation in Civil War: Micro-Level Evidence from Syria**

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### Abstract

Recent macro-level studies have revived interest in grievance-based explanations for civil war participation. Using original survey data from the ongoing conflict in Syria, we examine whether fighters, civilians, and refugees can be distinguished based on a number of proxies for personal, sectarian, and regime-based grievances at the micro-level. Based on a well-balanced sample of over 300 active rebel fighters, civilians from within the conflict zone, and externally displaced refugees, we observe that some proxies for grievances are elevated among active combatants. Our results speak to the plausible role of grievances in differentiating combatants from non-combatants during civil war. We also evaluate a potential psychological mechanism where grievances drive individuals to discount risks of fighting out of a desire for agency and empowerment on one hand and anger, hatred, and revenge-seeking on the other, and we find some evidence in favor of both.

## Introduction

How important are grievances to understanding human behavior in civil war? For much of the past decade, research has tended to discount grievance-based explanations for the onset, duration, and outcome of conflict, focusing instead on conditions favoring the formation of insurgency, (Fearon and Laitin 2003, Collier and Hoeffler 2004), state capacity and structural conditions of the economy (Karl and Sobek 2004; Collier et al. 2004, Berman et. al. 2011), technologies of rebellion (Kalyvas and Balcells 2010), or degrees of organizational unity and fragmentation among groups in conflict (D. Cunningham 2006, K. Cunningham 2013). Recent research, however, has revitalized attention to grievances using more refined measures of political exclusion, economic, and ethnic inequality at the group-level (Wucherpfennig et. al. 2012; Cederman et. al. 2011, 2013; Buhaug et. al. 2014; Denny and Walter 2014). Our study looks for possible micro-level validation of the role of grievances in distinguishing conflict actors in civil war. Using survey evidence from inside the civil war in Syria, we seek to understand the role that grievances might play in differentiating among combatants, non-combatants, and refugees in an ongoing conflict.

The remainder of our study is outlined as follows. First, we provide an overview of the literature on civil war, highlighting work on grievances. Next, we offer hypotheses on individual-level grievances in civil war. We then discuss the appropriateness of our case selection, outline our research design and empirical strategy, summarize our data collection efforts, and present

results. We conclude with discussion of how our micro-level findings inform the existing literature on civil war participation.

### Role Differentiation in Civil War

What role might grievances play in distinguishing combatants from non-combatant civilians and refugee populations in civil war? Most work on refugees in conflict highlight exposure to and threat of violence or economic means and opportunity as important predictors of refugee flight (Davenport, Moore, and Poe 2003; Moore and Shellman 2004, 2006, 2007; Adhikari 2013). However, some research shows how war-related grievances may travel with refugee movements either internally or abroad, since refugees can encourage the diffusion and expansion of conflict (Salehyan and Gleditsch 2006). For civilians who remain in conflict zones, several micro-level studies suggest that combatants and non-combatants can be distinguished by intensity of grievances. Based on retrospective surveys of rebel factions in Sierra Leone's civil war, Humphreys and Weinstein (2008) find that people with strong grievances are more vulnerable to political manipulation and more likely to engage in violence. Examining Hezbollah fighters and suicide bombers, Krueger and Maleckova (2003) also find that the decision to fight is a function of long-standing grievances and frustrations. Arjona and Kalyvas (2008) also observe that both political grievances and economic deprivation drove mobilization for violence in Colombia.

Other studies, however, emphasize the blurring of lines, shifting loyalties, and transitional nature of civilian and combatant identities during violence. In particular, Kalyvas (2006) underscores the challenges of identifying combatant from non-combatant in civil conflict.

Wood (2003) has also posited complex in-group ties between rebels and civilians in conflict that breaks down the usual combatant/civilian dichotomy. Blattman and Annan (2016) provide evidence of how individuals transition in and out of combatant and civilian life depending on opportunity costs and material incentives. Lyall et. al (2013), Condra and Shapiro (2012), and Shapiro and Weidman (2015) document how civilian loyalties often shift toward and away from insurgency movements in Afghanistan and Iraq. Parkinson (2013) also highlights the important support role women played for rebel fighters during the civil war in Lebanon, challenging conventional notions of what it means to be a combatant during wartime. Combatants often rely on active civilian affiliates to make what they do on the frontlines possible. If grievances are shared by a broader fighting community of combatants and noncombatant supporters, they may be less helpful for understanding the role(s) people assume during civil war.

In this study, we focus on grievances as a possible sorting mechanism for civil war participation.<sup>1</sup> We offer evidence for whether grievances impact individuals' willingness to join combatant groups. We consider other non-grievance based explanations in subsequent work. Our main goal here is to explore whether there is any micro-level validation for grievance-based accounts of civil war participation based on a number of plausible proxy measures.

### Theory and Hypotheses

Grievances can be defined as a cause for complaint against others for perceived wrongs or injustices (Miller and Sarat 1980, Gordon and Miller 1984). Grievances often arise over

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<sup>1</sup> By participation, we mean a willingness to join combatant groups and otherwise support combatant efforts.

inequalities or relative deprivations of economic resources, political power, or social status (Gurr 1970). One way in which humans have commonly addressed grievances is by engaging in violent revenge-seeking (Chagnon 1988). Violence offers an avenue to resolve grievances against either a perceived source of grievance or transferring retribution onto others (Berkowitz 1989). Some argue that humans may be hard-wired for revenge-seeking as a means of evolutionary fitness (McCullough et. al. 2015). Psychologists also find that acting on impulses for revenge can enhance feelings of agency or self-worth (Knutson 2004; Schumann and Ross. 2010). However, turning to violence may also intensify and reciprocate revenge-seeking behavior in others, underscoring the intractable problem of resolving grievances and preventing cycles of violence (Bayer et. al. 2007).

Grievances sometimes find expression in violent collective action. Researchers have found evidence of grievances driving insurgent movements in a number of civil wars (Kalyvas 2006; Souleimanov and Aliyev. 2015; Costalli and Ruggeri 2015). To the extent that joining an insurgency increases opportunities to express deeply-held grievances through targeted acts of violence, individuals may be willing to discount inherent risks of fighting or otherwise forgo incentives to free ride (Weinstein 2006). People may also resort to organized violence due to the breakdown in the formal rule of law since the source of their grievances cannot be rectified through non-violent institutional means (O'Donnell 2004). In terms of mechanisms, grievances could drive people to violence by enhancing negative psychological emotions such as fear, anger, or desire for revenge (Petersen 2002). Another possibility is that participation in violence actually channels positive emotions in aggrieved persons such as pride, self-confidence, determination, or "pleasure of agency" (Wood 2003). Fighting could empower individuals to act

on a perceived source of grievance, and we consider whether combatants exhibit both positive and negative emotional ideations that are distinct from non-combatants.

Of course, grievances could come in many forms. To unpack grievances, we will draw distinctions between personal, collective-social, and political-regime based motivations. Personal grievances could provide a powerful rationale for joining rebel groups, increasing one's willingness to incur costs of fighting. Personal grievances in civil war may be directed at any number of different targets (Kalyvas 2006).<sup>2</sup> Here, we consider how grievances based on personal victimization could drive people into insurgencies. On one hand, victimization could be a powerful source of grievance, motivated by desire for agency and empowerment, revenge and score-settling (Orth et. al. 2006). However, victimization could also place undue burdens on individuals preventing them from acting out desires for retribution, because they are not physically able to do so due to severe injury or, in the event their home is destroyed, they must focus on providing for now-displaced families. Also, some forms of victimization could be acquired through the act of fighting such as personal injury or the loss of close friends, which is why we will consider a number of different types of victimization and control for the effects of exposure to violence after joining an insurgent groups. If grievances based on personal victimization drive individuals to violence, we hypothesize the following:

H1 (*Personal score-settling - Victimization*) Combatants have experienced higher levels of personal victimization than non-combatants.

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<sup>2</sup> Kalyvas (2006) shows how inter-personal grievances can be masked by loftier, idealistic intentions for fighting, which could explain the often observed phenomenon of neighbor-against-neighbor violence in civil war. People take opportunities during violence to settle scores.

In addition to personal grievances, we also consider whether individuals mobilize for violence in response to collective grievances held by their in-group against rival out-groups. Petersen (2002), in particular, has emphasized how *collective* fears, hatreds, and resentments can be an important precipitant of violence. To the extent that a civil war can be accurately characterized by ethnic, sectarian or other meaningful in-group out-group cleavages, we anticipate that parochial individuals would be driven into insurgencies to remedy collective grievances, while those with fewer in-group ties and out-group aversions would be more likely to flee from an ethnic or sectarian war that they neither support nor identify with. We test the following hypothesis:

H2 (*Sectarian hatred - Parochialism*) Combatants are more parochial than non-combatants.

Finally, we contemplate the role of grievances against a governing regime. We ask whether there are political-regime based grievances that are distinct from personal grievances or collective in-group/out-group divisions.<sup>3</sup> Humphreys and Weinstein (2008) among others reason that people who harbor political grievances are more easily manipulated into joining rebel insurgencies. Grievances motives are also consistent with Weinstein's (2006) distinction between *activist* versus *opportunistic* rebellions. To probe for the kinds of grievances one would associate with an *activist* rebellion, we consider three proxies for regime-based grievances – intense vilification of a political regime, a strong preference to vanquish the regime through military victory rather than negotiate for peace, and a desire to seek vengeance against regime loyalists for perceived crimes of the past. The first proxy may be considered an underlying

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<sup>3</sup> We will also consider the extent to which personal, collective, and regime-based grievances are inter-correlated in our analysis.

attitude or preference for regime change, while the remaining proxies may be thought of as combatant strategies one would associate with strong regime-based grievances.

On vilification, we ask whether rebel fighters naturally hold the most intense aversions to the regime they are fighting against. Refugees and civilians, in contrast, may refrain from fighting for lack of motivation to fight against a regime they do not necessarily oppose or for rebel causes they do not clearly support. However, if civilians and rebel fighters are functioning as one large fighting community, then differences in regime opposition could be negligible (Wood 2003). We test the following hypothesis:

H3.1 (*Activist rebellion - Vilification of the Regime*) Combatants have stronger aversions toward a governing regime and its supporters than non-combatants.

Next, we consider intensity of support for regime change as a proxy for regime-based grievances. To what extent are people willing to endure the costs of fighting to remove the regime from power, or are they amenable to bargaining with regime supporters for peace? In an *activist* rebellion Weinstein (2006) suggests that rebel fighters would be less favorable to negotiating with the regime than their civilian or refugee counterparts, preferring to fight until military victory, no matter the costs. Furthermore, if refugees are fleeing conflict for a lack of regime-based grievances, then they may be more open to negotiating settlements to bring the war to an end. However, Wood (2003) and Kalyvas (2006) provide a rationale for negligible differences due to the transformation of civilians and combatants into a broader fighting community. We hypothesize the following:

H3.2 (*Activist rebellion - Fight until Victory*): Combatants are more willing to incur costs to achieve military victory than non-combatants.

H3.3 (*Activist rebellion - No Bargaining for Peace*): Combatants are less supportive of negotiated settlements for peace than non-combatants.

As a final dimension to regime-based grievances, we inquire whether combatants are willing to reconcile with former adversaries in the interests of peace. As a proxy for grievance motives, we ask individuals whether they would be willing to grant amnesty to members of an opposing regime – i.e. forgo justice in the interests of peace (Snyder and Vinjamuri 2006). On one hand, if fighters are aggrieved and revenge-seeking, they should be opposed to any amnesty for regime loyalists. If civilians and refugees merely want the war to end so they may return to their homes, they could be the most willing to support amnesty as part of a negotiated settlement. On the other, grievance preferences could be shared by all groups, especially when the regime is indifferent to fighter-civilian distinctions on the battlefield and everyone is effectively treated as an enemy target. We test the following hypothesis:

H3.4 (*Activist Rebellion - Hold Accountable*): Combatants are less willing to grant amnesty to opposing forces for war-related violence, crimes, and atrocities than non-combatants.

In summary, we seek to understand how decision-making during conflict is affected by different proxies for grievances, using novel data from an important case of violence at a critical moment when war is still ongoing, people are still actively deciding what to do, and outcomes are uncertain.

## Grievances and the Syrian Civil War

To test hypotheses about grievances in civil war, we conduct our research in war-torn Syria. In March 2011, in the wake of the Arab Spring, violence in Syria broke out in response to a revolutionary movement to oust President Bashar al-Assad from power.<sup>4</sup> When the Assad regime responded to protesters with a brutal military crackdown, opposition groups organized an armed insurgency, and the Syrian civil war was underway. For much of the first two years of the war, rebel groups, loosely organized under the umbrella of “the Free Syrian Army”, fought against forces loyal to the Assad regime for control of key towns and supply routes. However, neither side was able to achieve a decisive military victory on the battlefield. In 2013, the Assad regime turned to increasingly brutal methods to route insurgents, including indiscriminate bombing of rebel-controlled towns and villages and the use of chemical weapons. While the United States threatened military intervention, it opted instead to provide economic aid and military training to rebel groups, while the Assad government pledged to dismantle chemical weapons arsenals and take part in a series of peace talks with rebels. Despite these commitments, the war raged on. It was in this environment that our study began in August 2013.

Since our field work in Syria was completed, the Free Syrian Army (FSA) has become increasingly fragmented, and new groups with stronger jihadist orientations have emerged to challenge both the FSA and the Assad regime for control of Syria. At present, there are now multiple insurgent groups, including the Al Qaeda backed Al-Nusra Front, the Iraqi-led Islamic State, Syrian Islamist groups like Ahrar al-Sham, and the degraded FSA, which are fighting both against the Assad regime and one another. In the meantime, over 470,000 people have been

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<sup>4</sup> The opposition was often characterized as peaceful, secular, and democratic at the beginning of the revolution but this depiction is now more contested.

killed in the conflict and millions more have been displaced internally and abroad since the war began (SCPR, 2016).

We argue that Syria is a useful case to test grievance-based theories of violence. Given the purported goals of the initial Syrian revolution – removing the Assad regime from power – the origins of the subsequent armed insurgency clearly speaks to grievance-based motivations in an *activist* rebellion (Weinstein 2006). In addition, the Syrian case enables us to test for collective parochial grievances. In our research, we examine individual grievances in communities of well-defined in-groups (Syrian Arab Sunni Muslims) inside rebel controlled territory and refugee camps abroad who fled those same communities.<sup>5</sup> Sectarian divisions are often presumed to exist between Arab Sunni Muslims and the Alawite minority, with Arab Sunni Muslims supporting the insurgency and Alawites supporting Assad. If deep-seated sectarian grievances are fueling the conflict, then the Assad regime merely represents a proxy for underlying grievances against Alawites.<sup>6</sup> By testing hypotheses of regime-based grievances against collective social-sectarian grievances, we can tease out whether regime opposition or sectarian hatreds are motivating people to fight.

Finally, with the war in its second year at the time of our study, we can assess the toll of victimization. Importantly, the perpetrators of violence against subjects in our study are external

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<sup>5</sup> We do not consider the role of Syrian Kurds or other minority groups in this study, who were not well-represented in our sampling locations.

<sup>6</sup> Some scholars, however, contend that this is an oversimplification of complex divisions in Syrian society and dispute that the current conflict is sectarian in nature. See Seale (1986) and Heydemann (1999) for historical background and Pierret (2013); Hashemi and Postel (2013) for analysis of the conflict.

to the local community. Victimization was a result of aerial bombardment, shelling, and sniper attacks by forces loyal to the Assad regime. At the time of our study, subjects in our sample did not face the immediate problems of neighbor-against-neighbor or otherwise intra-group violence described by Kalyvas (2006). Since our data collection was finalized, however, Sunni-on-Sunni violence has increased as various rebel factions battle one another in formerly uncontested areas. Our study was conducted in a unique window where rebel groups were still aligned against the Assad regime, and victimization of Sunni Muslims was almost exclusively regime-based. In addition, victimization in our sample is so widespread that we can capture meaningful between-group differences even with small samples. In an environment of near indiscriminate violence, everyone in rebel controlled territory, whether they supported the insurgency or not, was a potential target for attack by the Assad regime, making Syria an appropriate case for considering victimization-based grievances.

### Challenges of Fieldwork During Conflict

Most research on insurgency violence has relied primarily on retrospective interviews and surveys to understand determinants of participation in civil war or refugee flight. However, examining individual preferences and motivations in the midst of conflict is becoming more common, though not without considerable challenges.<sup>7</sup> On one hand, retrospective studies

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<sup>7</sup> Field research in combat zones is hardly unprecedented. Governmental and inter-governmental organizations routinely survey civilians in conflict environments such as Afghanistan and Iraq, as well as Syria. See also work by Beath et. al. (2013), Lyall et. al (2013, 2015) and Whitehouse

conducted over an extended period of time could allow for greater clarity of motivations, especially if people feel pressure not to reveal their true intentions either during or in the immediate aftermath of conflict (Kalyvas 2006). Time removed from violence could potentially lessen constraints and prohibitions on speaking openly and honestly. However, research on the psychology of memory suggests that retrospective studies may also be prone to “moral rationalizations” where conflict outcomes alter one’s perceptions of prior motives and beliefs (Tsang 2002). Numerous studies have shown, for example, that information and experiences after an event can influence how people recall the event and color emotional memories (Bartlett, 1932; Loftus 1992; Levine 1997; Safer et. al. 2002).<sup>8</sup> Collective memory, i.e. “the representation of the past embodied in both historical evidence and commemorative symbolism” (Schwartz 2000, p.8) could also bias the recall of critical decisions and events (Harris et. al. 2008). We believe that the timing and location of our study may help us understand how people make decisions and interpret those decisions when outcomes are still unknown. However, our research, conducted in the midst of conflict rather than before or at the onset, is also essentially retrospective. To what extent are people being honest and forthcoming regarding their true

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et. al. (2014). Various surveys have also been carried out involving civilians and IDPs inside Syria, including within the territory of the Islamic State. For example, see <http://www.opinion.co.uk/article.php?s=orbiiacss-poll-in-iraq-and-syria-gives-rare-insight-into-public-opinion>

<sup>8</sup> Safer et. al. (2001) and Levin et. al. (2001) show that recalled emotions about a tragic event are better correlated with current feelings of grief than with an actual grief reported at the time of event. Safer et. al. (2002) show that recalled emotions are biased by information acquired later.

preferences and beliefs? How can we distinguish *a priori* motives from socialization effects of time in combat or exposure to violence?

In addition, when retrospective studies are conducted in the aftermath of an especially protracted, brutal civil war, there is obvious selection bias on survivors, and we do not know how people who survive differ from those who do not. If fighters and civilians in combat zones are disproportionately killed, then many critical actors in the conflict would be non-randomly selected out of those studies. We attempt to address the retrospective selection bias problem by surveying people as conflict is still ongoing and survival is still highly uncertain. Nevertheless, selection bias is still a problem for us due to the attrition of rebel fighters through combat and massive displacement of civilian refugees internally and abroad. With such unstable population parameters, what does a representative sample even mean?

In addition, gaining access to combatants, civilians, and refugees under conditions of ongoing conflict and population fluctuation can be daunting.<sup>9</sup> It is difficult to reach sub-populations of interest due to dangerous and uncertain conditions in the field, which make random sampling and therefore population inferences difficult to achieve. While acknowledging all the above challenges and ultimately limitations of our research, we attempt to capture a broader range of subgroups to active and former rebel fighters, fighters from different groups,

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<sup>9</sup> In addition, our study takes place in the absence of any coordinated international peacekeeping intervention in the field. If we were to wait to conduct research under the security umbrella of peacekeeping forces then we are no longer studying decision-making under active conflict, but rather under third-party enforcement and monitoring, which is known to significantly alter individual and group level decision-making and behavior in the field (Doyle and Sambanis 2000; Fortna 2004).

civilians in combat zones and refugees in camps. We hoped that our multi-group approach would allow us to compare differences between civilians, combatants, refugees at a time when they are still determining their respective roles in the conflict. Nevertheless, conditions for field research were far from ideal; and we are limited in terms of our ability to draw clear causal inferences from our data. Our research is highly exploratory.

Finally and most importantly, the decision to conduct this research was not taken lightly. Our foremost concern was for the safety and well-being of our respondents and our field researcher. We designed our study with an emphasis on minimizing risks to participants.<sup>10</sup>

### Research Design

Our research employs survey methods. For ecological validity, we conduct our study in multiple locations and among various sub-populations of interest to include civilians, rebel fighters, and refugees. Our survey instrument is wide-ranging, encompassing a number of themes. It begins with an emotional battery, followed by demographics, rebel group participation, refugee status, and then attitudinal questions about perceptions of safety and security, general outlook for the future, ethnicity, religiosity, social identity and inter-group

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<sup>10</sup> In the summer of 2013, we believed that the research could be conducted safely in certain areas of Syria. However, the environment in Syria has changed dramatically and for the worse since we completed our field research in Syria in 2013. At that point in time, there were numerous international aid organizations working in the region, and travel within Syria was much safer than under current conditions. What we were able to do 2013 would not be possible in the current environment in Syria.

relations. We then introduce questions specifically about the Syrian conflict including views of different combatant groups, the peace process, international interventions, and Syria's future to include preferences for democracy and post-war reconciliation. We conclude the survey with questions about victimization by violence, displacement, and property damage.

After the survey, additional data were collected on respondents' safety and comfort levels with the location of the interview and the questions asked by the interviewer.<sup>11</sup> We also included similar items for the interviewer about safety and comfort levels while conducting each interview. As an incentive to participate, subjects were paid approximately \$5 for their time, as the study generally took between 45 minutes to an hour to complete. All interviews were conducted by one of the authors, face-to-face, in Arabic, with assurances of privacy and confidentiality in what both the subject and interviewer deemed to be a safe location.<sup>12</sup>

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<sup>11</sup> One concern could be that respondents only provide socially desirable responses to survey questions. Due to the small sample size (a requirement of our IRB), we were unable to conduct more sophisticated analysis of response sensitivity using list or endorsement experiments, which require randomization into treatment and control groups (Bullock et. al. 2011). However, we did ask everyone at the end of the survey how they felt about the questions asked of them in the interview and 87% said that they felt comfortable answering the questions.

<sup>12</sup> We only interviewed people in what they (the subjects) considered to be a safe location away from frontlines of combat. 90% of the subjects we interviewed inside Syria said that they felt safe conducting the interview in their current location. We also strove to protect the identity of the subjects, so that no personal identifiers could be linked to the survey data. We have also the highest concern for the safety of those carrying out the research. 90% of the time, the interviewer

## Sampling and Data Collection

Sampling and data collection were major challenges for this project due to potential risks posed to our interviewer as well as subjects inside Syria. Minimizing risk to our participants was the utmost priority. Because we are targeting difficult to reach subpopulations in a potentially dangerous environment with unknown population parameters, we utilize cluster sampling methods to better target sub-populations of interest.<sup>13</sup> We identify two regions inside rebel contested areas of Syria for data collection. First, we sampled in and around Aleppo, Syria's second largest city, which has experienced ongoing violence between rebel forces and the Assad regime. As a comparison point, we also sample in and around the city of Idlib, which was

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said that he/she felt safe in the interview location. Nearly 99% of the time, the interviewer claimed he/she felt very safe interviewing the subject.

<sup>13</sup> We cannot make population inferences from our data. Our research is exploratory. Interviewing rebel fighters and civilians in a combat zone potentially exposes both the interviewer and subjects to risk. We devised a cluster sampling method, which would minimize potential risks to all our study participants relative to the risks they assume by remaining inside an active combat zone. Cluster sampling enabled us to include a random element to the sample selection process while taking into account the safety and security of our participants. Finally, consistent with ethnographic approaches to in-depth interviewing and field research methods, we believe that surveying active rebel fighters and civilians in combat requires the interviewer to gain trust and acceptance within the community before they are willing to grant permission/consent to be interviewed. This design received IRB approval.

generally considered a safer area for rebel forces and civilians at the time of our research than Aleppo.

For recruitment of civilians, we avoid random route sampling due to inherent uncertainties and dangers of movement from street to street. We also refrain from door-to-door sampling to protect our interviewer. Instead, we identify areas of the city, locations where civilians are congregated in public. These clusters are our initial sampling point. Interviews are conducted with no more than five respondents per cluster and no more than two clusters for a given street or neighborhood. We limit our interviews to 1 person per household or extended family. If multiple family members are able and willing to participate, we select one family member at random. Each interview was conducted in a public location for safety concerns, but the interviewer kept a distance from crowds to ensure privacy, and did not permit others to listen in on the interview once in progress. We entrusted our interviewer to use discretion when deciding where to conduct interviews.

To access refugee flight motivations in civil war, we survey a sample of refugees from a UNHCR run refugee camp in Kilis, Turkey, which is just across the border from Syria and a primary destination for refugees fleeing the Aleppo and Idlib regions. Inside the camp, the interviewer followed a random route, interviewing no more than 1 per household and no more than five subjects on a given street or pathway.

For interviews with rebel fighters, we sample from two predominant groups – rebels fighting with the Free Syrian Army (FSA) and Islamists with various groups including the

Islamic Front/Ahrar ash-Sham and Al-Nusra Front.<sup>14</sup> We identify locations where rebel fighters are currently positioned based on local knowledge. Interviews of FSA rebels are conducted in both Aleppo and Idlib regions. Interviews with Islamists are only in the Idlib area. Although we conducted qualitative interviews with people on different levels of the chain of command, we limited our survey to only rank-and-file FSA and Islamist fighters, not officers or unit leaders. For a given unit or cluster of FSA or Islamist rebels, we interviewed no more than five soldiers per cluster or unit. We also interviewed former-FSA fighters who have since stopped fighting and now reside in Turkey to capture the behavior of those who join and, for various reasons, have exited the conflict.<sup>15</sup>

Because of safety and security concerns as well as practical challenges of conducting field research, we collected data incrementally from August 2013 until May 2014 in a series of month-long waves.<sup>16</sup> Our response rate was over 80% in each location among those contacted for

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<sup>14</sup> Of course, some members of the Free Syrian Army (FSA) may also be expressly religious and devout Muslims. By Islamist groups, we mean those groups that explicitly claim to fight for purposes of Jihad and Shariah Law, which the FSA leadership rejected.

<sup>15</sup> Ex-FSA fighters were also identified using cluster-sampling methods, since ex-fighters in Turkey often congregated with one another in certain cities and neighborhoods (ex. Gaziantep). We will highlight and discuss differences between active and former rebel fighters in more detail in a subsequent manuscript on insurgent attrition.

<sup>16</sup> Sampling over an extended time frame was necessary due to the challenges of working in this field environment. During the period of our sampling, the conflict had stabilized where neither the Assad regime nor the Free Syrian Army were gaining ground on the battlefield. The Islamic State had yet to emerge in full force (at least not in our sampling areas), and there were a series

an interview, which we believe is due in part to financial incentives to participate in the study. Even rebel fighters had periods of rest during the conflict and were eager to express their views. In total 305 subjects took part in the study as indicated in Table 1 below. We note that our samples are remarkably well-balanced across gender, age, education, and whether the subject was employed before the war began (a proxy for pre-war income/savings). Nevertheless, we include extended controls for demographics in our subsequent analysis.

Table 1 about here

### Empirical Strategy

We begin by considering a range of grievance instruments in our survey data. We use regression models to examine revealed differences in grievances across groups in our sample. For example, if fighters claim to be joining rebel groups out of desire for revenge, to what extent do they exhibit revenge-seeking attitudes that are markedly greater than civilians or refugees? Our reasoning is that indirect measures of preferences are less susceptible to social desirability biases or other contaminating effects. Indirect measures of preferences and motivations also provide an important robustness check on what people claim as their stated goals, motivations, and intentions.

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of failed attempts to negotiate a peace agreement in Geneva. Hence, we do not anticipate major confounding effects of history in analyzing our data during this period of the conflict.

To test hypotheses about grievances held by combatants, noncombatants, and refugee sub-groups, we turn to binary and multinomial logit models. Our key outcome or dependent variable of interest is the logistic transformation of a discrete variable ( $Y_{ij}$ ) denoting whether individual ( $i$ ) is a member of sub-group ( $j$ ). In the binary logit versions of the model, our comparison groups consist of a simple “fighter” model (1 = active combatants vs. 0 = non-combatants) and then a “refugee” model (1 = refugees vs. 0 = non-refugees). In the multinomial logit model, we expand the group outcomes to include the five broader subgroup categories (1 = FSA fighters, 2 = Islamists, 3 = ex- FSA fighters, 4 = Civilians, 5 = Refugees). Our key explanatory variable ( $\Gamma_{ij}$ ) consists of different attitudinal measures of grievances, while  $X_{ij}$  is a vector of controls for covariates such as gender and age. We also control for education and prior employment as proxies for income-based selective incentives and opportunity costs that might counter grievance-based explanations for violence (Humphreys and Weinstein 2008).

$$F(Y_{ij}) = \ln(\pi / 1 - \pi) = \beta_0 + \beta_1 \Gamma_i + \beta_2 X_i + \varepsilon_i$$

Of course, all our primary variables of interest are observational in nature, so any causal claims about how and why individuals take on different roles in conflict are subject to identification problems due to endogeneity, selection, and sorting effects. We apply extended controls ( $X_{ij}$ ) based on gender, age, education, and prior employment to help deal with potential sorting effects and selection on observables.<sup>17</sup>

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<sup>17</sup> Some have suggested that we also reverse our regression models, treating grievances ( $\Gamma_{ij}$ ) as a dependent variable and test the null hypothesis (H0) that there are no meaningful differences between fighters, civilians, and refugees such that  $\Gamma_{ij} = \beta_0 + \beta_1 X_{ij}^{\text{fighters}} + \beta_2 X_{ij}^{\text{civilians}} + \beta_3 X_{ij}^{\text{refugees}} + \beta_4 X_{ij}^{\text{controls}} + \varepsilon_{ij}$ . We find consistent results using both modeling strategies. We also conduct

Finally, because individuals are already in their respective roles at the time of our study (fighters, refugees, civilians), it is difficult to distinguish between a priori motivations from socialization effects after the fact. To address this problem, we can control for *time in group*. For example, we know how long individuals have been fighting with various rebel groups or how long they have been living as refugees abroad. By comparing seasoned fighters to new recruits, we estimate the strength of socialization effects over time. This helps us assess whether, for example, rebels enter into a conflict with a long list of grievances or whether they simply acquire those grievances over time as a consequence of fighting.

## Analysis

### *Proxies for Personal Grievance*

We evaluate individual-level grievance motivations based on a range of victimization indicators (H1). In Table 2 below, we present the average marginal effects from logit models of self-reported victimization.<sup>18</sup> First, we begin with victimization in the form of personal injury

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further analysis of non-grievance based explanations for conflict based on selective incentives, social sanctioning, social identity, and risk tolerance in a supplementary appendix, which we intend to discuss in greater detail in subsequent manuscripts. Here, we focus on linking attitudes and behavior in civil war to meaningful proxies of grievances, but this should not imply that alternative non-grievance based explanations are somehow irrelevant.

<sup>18</sup> This is done to economize space. Full logit model specifications are available in an online supplementary appendix. Although absolute marginal effects may be sensitive to sample size, they are still useful for comparing the relative effect of different grievance covariates.

and property destruction. Over half our sample report experiencing personal injury and nearly one-third of our sample indicate some form of property destruction. In Table 2 we find that differences in personal injury experiences are not significant across groups. However, one possibility is that we are selecting on only people with minor injuries in our sample, as those with more serious injuries remain in hospitals or lack the capacity to conduct interviews. We find more support for H1 when assessing differences in property destruction. People inside the combat zone (FSA, Islamists, and civilians) are less likely to have suffered property damage and destruction than those who are displaced in Turkey (civilian refugees and ex-fighters). Rather than joining the fight, people who lose their homes and business are more likely to flee abroad.

Next, we examine the possible effects of victimization by loss of individual family members and close friends. Over *two-thirds* of our sample report that family members and close friends have been injured, killed, or are missing since the war began. However, Table 2 shows that Islamist fighters have experienced more victimization of family and friends compared to others. Of course, people who remain in combat zones could experience more victimization, so it is an effect of the decision to remain in a combat zone rather than a cause. However, time serving with rebel groups is not a significant predictor of victimization in our sample.<sup>19</sup> In general, personal grievances proxied by victimization do not help distinguish between FSA rebels, civilians, and refugees, who experience comparable losses of family and friends. H1 appears valid for Islamist rebel fighters only.

#### *Proxies for Sectarian Grievance*

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<sup>19</sup> Correlation coefficients on the effects of time are available in an online supplementary appendix.

We now turn to questions of collective parochial grievances based on sectarianism. We hypothesized that combatants should have stronger in-group bonds and greater out-group aversions (H2) if parochial grievances are present. We first consider in-group ties. Using social distance as another proxy for sectarianism, we ask how close people feel to other Sunni Muslims in Syria. In general, the survey indicates strong in-group sectarianism in our sample. Over half our sample indicate that they feel “very close” to Sunni Muslims, while less than 1% feel “not close at all”. Examining subgroup variation in Table 2, we find that Islamists have strongest ties to other members of their religious in-group. However, differences among FSA rebels, ex-FSA, civilians and refugees are negligible. Therefore, we only find support for H2 with respect to Islamist rebel fighters.

We then examine out-group aversions, focusing on the Alawite minority, who are often characterized as supporters of the Assad regime. We ask subjects how close they feel to Alawites in Syria. Again, we find strong sectarianism in survey responses. Less than 3% feel “very close” to Alawites in Syria, while over half (56%) feel “not close at all”. Examining the models in Table 2, civilians are the least sectarian among the subgroups, while Islamist fighters are the most. FSA fighters, by contrast, are not distinctively out-group averse. Hence, H2 again appears valid mainly for Islamist fighters.

Finally, in a supplementary appendix, we consider inter-correlation between personal and sectarian grievances, and we find that personal injury, home destruction, and the death of friends and family are not well correlated with sectarian grievances. Hence, victimization and sectarianism are capturing different dimensions of grievance. Also, ties to Sunni Muslims do not clearly predict distance toward Alawites, suggesting that in-group/out-group perceptions are not clearly inversely related. In-group ties and out-group aversion also do not increase with time

spent in a rebel group, so we do not find that collective grievances are simply a consequence of socialization effects after joining insurgencies.

In summary, while there are clear sectarian divisions between how Sunni Muslims view one another compared to Alawites, these distinctions are not sufficient to understand why everyone chooses to fight. Strongest support for H2 is found among the Islamists, implying that those with sectarian grievances select into different types of rebel groups. FSA fighters are no more parochially sectarian either in terms of in-group bonding or out-group aversion than non-combatant civilians and refugees.

#### *Proxies for Political Grievance*

We now examine the extent to which combatants express grievances consistent with Weinstein's (2006) *activist* rebellion conceptual framework (H3). First, we ask all combatants to indicate why they joined the insurgency. Two main reasons given were "because Assad must be defeated" and "to take revenge against Assad's forces", which both imply that regime-based grievances are driving them to fight.<sup>20</sup> Here, we assess whether such grievances are born out in comparison to non-combatants and whether stated political grievances might actually mask underlying sectarian and personal grievances at work.

First, we inquire whether respondents draw distinctions between Alawites in general and vilification of the Assad regime (H3.1). Using measures of social distance, we find that people feel more distant to supporters of the Assad regime than to Alawites in our survey (80% vs. 57%

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<sup>20</sup> We discuss stated-rationales for joining rebel groups in further detail in the supplementary appendix.

respectively).<sup>21</sup> We then compare views of the Assad regime across subgroups in our sample. In Table 2, Islamists are most opposed to the Assad regime. In addition, we find that vilification of the Assad regime does not intensify with time spent fighting inside a rebel group, such that regime-based grievances are not simply a socialization effect. Overall, H3 is best supported by the attitudes of Islamist fighters. However, since all subgroups are more opposed the Assad regime than toward Alawites in general, regime-based grievances appear to cut deeper than sectarian divisions in Syria.

If grievances are primarily directed at the Assad regime, we hypothesize that rebel fighters will be far more committed to a strategy of military victory and less willing to negotiate for peace with Assad's forces compared to civilians and refugees (H3.2-3). In Table 2 we confirm that rebel fighters are more likely than civilians to believe that the Assad regime should be defeated no matter the costs. Conversely, civilians and refugees are more likely to support an immediate ceasefire to negotiate for peace. Consistent with the *activist* rebellion framework, support for H3.2-3 appears strong.

We also find that rebel fighters are less willing to trade justice for peace (H3.4). We ask respondents whether everyone in the Assad regime should be held accountable for war crimes or only the top leadership. In support of H3.3, rebel fighters are far more committed to holding everyone linked to the Assad regime accountable for crimes committed during the war. In contrast, refugees and civilians are more willing to support a general amnesty in the interests of

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<sup>21</sup> We employed multiple measures to capture vilification of “the Assad regime” as well as “supporters of the Assad regime”. Our results are consistent across these measures. Respondents oppose/blame the Assad regime more than Alawites in general for the ongoing violence.

peace, undercutting the notion that they are as heavily aggrieved as rebel fighters. Hence, we also find strong support for the *activist* rebellion framework in H3.4.

Finally, we consider inter-correlation between political and other grievances and time-effects in the supplementary appendix. First, most items are not well-correlated. It appears that political, sectarian, and personal victimization variables are capturing different aspects of grievance.<sup>22</sup> Also, when we control for how long fighters have been actively fighting, how long refugees have been living in camps, and how long civilians have been living in their current locations, we find the effects of time are negligible or not significant for fighters and civilians. This helps reduce concerns that our observations of political grievances are primarily endogenous to socialization effects of fighting, staying, and leaving - mere rationalizations after the fact. The only notable socialization effect we found was that refugees have increased feelings of group solidarity the longer they spend in camps. See the supplementary appendix for further details.

Table 2 about here

In summary, political and regime grievances highlight salient differences between combatants and non-combatants, civilians and refugees. Consistent with an *activist* rebellion framework, rebel fighters report that they join for the sake of regime change, while civilians and refugees are less inspired by these goals and do not join. Furthermore, civilians and refugees are

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<sup>22</sup> We discuss inter-correlations among grievances in more detail in a supplementary appendix.

willing to consider negotiated settlements for peace that may include amnesty and reconciliation with opposition groups, something that rebels are far less willing to do. Overall, we find evidence that political and regime grievances play a role in distinguishing those who fight in civil war from those who do not.

### *Exploring Possible Mechanisms*

If and when grievances are present, how might they induce individuals to resort to violence? Here, we explore plausible mechanisms linked to emotions, which could cause ordinary rational actors to discount the risks of fighting. We speculate that grievances could enhance negative affect in the form of anger, hatred, or desire for revenge, driving individuals into violence (Petersen 2002). We also consider that aggrieved individuals might turn to violence to express a sense of personal agency and empowerment (Wood 2003). To further tap into emotions during conflict, we administered a variation on the PANAS-X scale of positive and negative affect at the beginning of the survey (Watson and Clark 1999). Respondents are asked to report on a range of emotions they might have felt over the past few days (1 = very slightly/not at all to 5 = extremely). In Table 3, we report the average marginal effects of positive-affect responses (ex. happy, alert, confident) and negative affect (ex. afraid, angry, sad) in logit models. The PANAS-X scale reveals that, rebel fighters display some stronger positive affect (pride, self-confidence) as well as higher negative affect (anger, hostility, hatred) than civilians. These heightened affects are noted primarily among Islamist fighters, not the FSA. Refugees, in contrast, stand out on other dimensions of negative affect (fear, fatigue, sadness, guilt). Hence, we find some evidence to suggest a mechanism where grievances work to stimulate both a sense of agency and empowerment as well as anger, hatred, and desire for revenge among combatants.

Table 3 About Here

## Discussion and Conclusion

Our research provides a glimpse into possible sorting mechanisms that are taking place between committed fighters, civilians and refugees in the midst of civil conflict. We observe mixed motivations and preferences in different subpopulations of civil war participants (rebel groups, civilians, refugees). People are fighting, leaving, and staying for myriad, complex reasons, but grievances play a role in distinguishing combatants and non-combatants in our sample. Our research advances the literature on conflict participation by unpacking the concept of grievances into different composite forms (personal, collective, regime-based) and exploring possible causal mechanisms linked to emotions. Based on access to empirical data from an intense, ongoing conflict, we find that not all grievances are equivalent predictors of who joins rebel insurgencies.

First, we find evidence of strong sorting on political, regime-based grievances between combatants/non-combatants in our sample. While rebel fighters, civilians, and refugees are united in their vilification of a brutal, authoritarian regime, rebel fighters are much less willing to negotiate for peace than civilians or refugees, wanting nothing less than victory and vengeance. Our results speak to work by Weinstein (2006); Humphreys and Weinstein (2008); Lyall (2009); Condra and Shapiro (2012); and Lyall et. al (2013) which show how regime-based violence can fuel insurgencies within a civilian population. In contrast, other forms of social sectarian and personalized forms of grievance are less predictive of role differentiation in civil war. Here,

some of our findings support work by Kalyvas (2006) and Wood (2003) on the blurring of lines between combatants and non-combatants.

We also develop insights by disaggregating victimization-based grievances. We find that the loss of family and friends is an especially powerful grievance motive for fighting. However, other forms of victimization, such as the destruction of housing, are more likely to induce people to take flight. By specifying how different forms of state repression may affect incentives for refugee flight, our findings help inform observations from research at the macro-level (ex. Davenport et. al. 2003; Moore and Shellman 2007).

Regarding collective grievances, we find strong sectarian divisions in our sample. Consistent with Petersen (2002), individuals exhibit hyper-polarized views of in-groups vs. out-groups. However, because sectarian divisions permeate the group, they are not clearly predictive of who fights and who does not. On one hand, this finding supports work by Fair et. al. (2010) that intense religiosity and sectarianism are not exclusive to fighters. However, we also observe that Islamist fighters are significantly more sectarian than comparable FSA fighters, so collective grievances could be important for selection into rebel groups with different purported goals.<sup>23</sup>

Finally, our research explores individual decision-making, attitudes and preferences in an ongoing conflict. In retrospective studies, it is unclear the extent to which people re-imagine their

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<sup>23</sup> Our research suggests that personal and sectarian grievances are higher among Islamist rebels than those within the Free Syrian Army. We also note at the time of our study that many rebel soldiers were abandoning the Free Syrian Army in favor of more ideologically Islamist rebel groups. We will devote more attention to distinctions between various rebel fighting groups in a subsequent manuscript.

experiences through the lens of conflict outcomes in a reconciled post-war society. We also know that some of those who are intensely involved in conflict do not survive to recount their experiences. The effects of healing over time and selection on survivors may discount the raw intensity of grievances held by those who fight and die for salient political causes. In an ongoing civil war, we find that grievances could play an important role in distinguishing combatants from non-combatants in the process of insurgency mobilization.<sup>24</sup>

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<sup>24</sup> We do not claim that grievances are uniquely important to understanding civil war mobilization. We explore other factors related to selective incentives, opportunity costs, social sanctioning pressures, risk tolerance in more detail in a supplementary appendix to this manuscript, and will consider alternatives to grievances in more detail in subsequent work. Our main goal here is simply to see whether we can find any validation of grievance-based explanations for civil war mobilization at the micro-level. Using a number of proxies for grievances, we argue that grievances should not be entirely ignored or discounted when theorizing why people mobilize for violence. At the same time, we acknowledge our limited ability to draw causal inferences about grievances, due to the observational nature of our data and the challenges of conducting field work in a conflict environment.

Table 1. Descriptive Statistics

	Mean	SD	N
FSA fighters	0.20	0.40	305
Islamist fighters	0.16	0.37	305
Civilians inside Syria	0.28	0.45	305
Refugees in Turkey	0.20	0.40	305
Ex-FSA in Turkey	0.16	0.37	305
Aleppo	0.31	0.46	305
Idlib	0.33	0.47	305
Turkey	0.36	0.48	305
Female	0.12	0.33	305
Age	29.80	9.39	296
Education	2.47	0.72	296
Employed	0.84	0.37	297

Balance across sub-samples (Combined KS-statistics)

	Fighters vs. non- fighters	Refugees vs. non- Refugees	FSA vs. Islamists	Fighters vs ex- fighters	Fighters vs. civilians	Fighters vs. refugees	Refugees vs. Civilians
Female	0.05	0.06	0.09	0.09	0.08	0.08	0.03
Age	0.06	0.16	0.18	0.17	0.06	0.14	0.12
Education	0.08	0.03	0.07	0.25**	0.09	0.05	0.09
Employed	0.00	0.09	0.04	0.00	0.09	0.07	0.13

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table 2. Grievances and Civil War Participation (Average Marginal Effects)

Personal Grievances							
Model	(1)		(3)				N
	Fighters	Refugees	FSA	Islamists	Ex-FSA	Civilians	
Personally injured (1.1)	0.01 (0.06)	-0.02 (0.05)	0.01 (0.05)	-0.00 (0.05)	0.08** (0.04)	-0.07 (0.05)	284
Home destroyed (1.2)	-0.27*** (0.05)	0.18*** (0.05)	-0.10** (0.05)	-0.17*** (0.04)	0.13*** (0.05)	-0.05 (0.05)	284
Family killed (1.3)	0.08 (0.06)	-0.19*** (0.05)	-0.05 (0.05)	0.12*** (0.04)	0.14*** (0.04)	-0.02 (0.05)	284
Friends killed (1.4)	0.38 (0.28)	-0.19*** (0.06)	-0.05 (0.05)	0.13*** (0.04)	0.12*** (0.04)	-0.01 (0.06)	284
Collective Grievances							
Close to Sunni Muslims (2.1)	0.12*** (0.04)	0.04 (0.03)	0.06 (0.06)	0.15** (0.06)	0.04 (0.06)	-0.33*** (0.08)	278
Close to Alawites (2.2)	-0.09** (0.04)	-0.10*** (0.03)	0.12 (0.18)	-0.27*** (0.03)	-0.13*** (0.03)	0.53*** (0.18)	278
Political Grievances							
Close to Assad Supporters (3.1)	-0.10 (0.07)	-0.08 (0.05)	0.03 (0.13)	-0.20*** (0.03)	-0.18*** (0.02)	0.49*** (0.16)	275
Fight until Victory (3.2)	0.20*** (0.02)	-0.07*** (0.02)	0.21*** (0.04)	0.28*** (0.03)	-0.45*** (0.14)	-0.44*** (0.13)	282
Bargain for Peace (3.3)	-0.15*** (0.02)	0.06*** (0.02)	-0.18*** (0.04)	-0.29*** (0.04)	0.04 (0.05)	0.25*** (0.06)	279
Accountable for crimes (3.4)	0.21*** (0.07)	-0.24*** (0.09)	0.04 (0.06)	0.18*** (0.03)	0.20*** (0.04)	-0.15* (0.08)	282

Average Marginal Effect with discrete variables treated as factorials. For Model 1 and 2, AME is for 1 unit increase in key IV. For Model 3, AME is for an increase from the lowest level to highest level (i.e. not close at all to very close, strongly disagree to strongly agree). See Appendix Table 1 for a description of variable coding. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table 3. Emotions in Conflict (Average Marginal Effects)

Model	(1)		(3)				N	
	Fighters	Refugees	FSA	Islamists	Ex-FSA	Civilians		
Positive Affect	Happy, joyful, cheerful, delighted, excited, enthusiastic, lively, energetic	-0.01 (0.02)	0.02 (0.02)	0.00 (0.02)	-0.01 (0.02)	0.00 (0.02)	-0.02 (0.02)	283
	Alert, attentive, concentrating, determined	0.01 (0.03)	0.03 (0.02)	0.01 (0.02)	0.00 (0.02)	0.01 (0.02)	-0.05** (0.02)	280
	Proud, strong, confident, bold, daring, fearless	0.05** (0.02)	-0.02 (0.02)	-0.00 (0.02)	0.05*** (0.02)	-0.03 (0.02)	0.00 (0.02)	281
Negative Affect	Afraid, scared, frightened, nervous, jittery, shaky	-0.07*** (0.03)	0.03** (0.02)	0.00 (0.02)	-0.07*** (0.02)	0.02 (0.03)	0.00 (0.02)	282
		Angry, hostile, irritable, disgusted, loathing/hatred	0.04* (0.02)	-0.01 (0.02)	-0.02 (0.02)	0.06*** (0.02)	-0.02 (0.02)	-0.01 (0.02)
	Sad, blue, downhearted, alone, lonely	-0.02 (0.02)	0.10*** (0.02)	-0.04** (0.02)	0.02 (0.02)	-0.02 (0.02)	-0.06*** (0.02)	284
		Guilty, ashamed, blameworthy, angry at self, disgusted at/dissatisfied with self	-0.06*** (0.02)	0.04** (0.02)	0.02 (0.02)	-0.09*** (0.02)	-0.01 (0.02)	0.03* (0.02)
	Sleepy, tired, sluggish, drowsy	-0.04 (0.02)	0.05*** (0.02)	0.02 (0.02)	-0.06*** (0.02)	0.01 (0.02)	-0.02 (0.02)	283

Extended Controls, Robust standard errors in parentheses. AME is for an increase from the lowest level to highest level. See Appendix Table 1 for a description of variable coding. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Appendix Table 1. Variable Description and Coding

Variable	Description	Mean	SD	N
Female	1 = female subject, 0 = male subject	0.12	0.33	305
Age	Subject age in years from 18 to 60	29.80	9.39	296
Education	Subject education from 1 = no formal education to 4 = post-secondary education	2.47	0.72	296
Employed	1 = working before the war, 0 = unemployed, not working	0.55	0.50	297
Personally injured	1 = injured as a result of violence during the war, 0 = not injured	0.55	0.50	305
Home destroyed	1 = home destroyed as a result of violence during war, 0 = not destroyed	0.32	0.47	305
Family killed	1 = family member killed as a result of war, 0 = no family member killed	0.61	0.49	305
Friends killed	1 = close friends killed as a result of war, 0 = no close friends killed	0.73	0.45	305
Close to Sunni Muslims	How close do you feel to the following? [Sunni Muslims in Syria] 1 = not close at all, 4 = very close	3.32	0.72	299
Close to Alawites	How close do you feel to the following? [Alawites in Syria] 1 = not close at all, 4 = very close	1.62	0.81	299
Close to Assad supporters	How close do you feel to the following? [Supporters of the Assad regime] 1 = not close at all, 4 = very close	1.22	0.48	296
Fight until victory	Tell me whether you support or oppose the following [Continue Fighting until the Assad regime is defeated, no negotiations with the Assad regime] 1 = strongly support, 4 = strongly oppose	3.10	1.23	302
Immediate ceasefire	Tell me whether you support or oppose the following [Immediate ceasefire to begin negotiations with Assad's forces] 1 = strongly support, 4 = strongly oppose	2.16	1.30	299
Hold accountable for crimes	Which of the following statements comes closer to your view: 1 = Only the top leadership should be held accountable for crimes committed during the war in Syria 2 = All those responsible for war crimes in Syria should be held accountable for what they have done	1.86	0.35	303
Happy, joyful	Please indicate the extent to which in the last few days you have felt the following: 1 = slightly, not at all to 5 = Extremely	2.68	1.21	303
Alert, attentive	Please indicate the extent to which in the last few days you have felt the following: 1 = slightly, not at all to 5 = Extremely	2.99	1.11	300
Proud, Strong	Please indicate the extent to which in the last few days you have felt the following: 1 = slightly, not at all to 5 = Extremely	2.81	1.25	301
Afraid, scared	Please indicate the extent to which in the last few days you have felt the following: 1 = slightly, not at all to 5 =	2.80	1.09	302

Angry, hostile	Extremely Please indicate the extent to which in the last few days you have felt the following: 1 = slightly, not at all to 5 = Extremely	2.87	1.26	302
Sad, lonely	Extremely Please indicate the extent to which in the last few days you have felt the following: 1 = slightly, not at all to 5 = Extremely	3.05	1.23	304
Guilty, ashamed	Extremely Please indicate the extent to which in the last few days you have felt the following: 1 = slightly, not at all to 5 = Extremely	2.61	1.21	304
Sleepy, tired	Extremely Please indicate the extent to which in the last few days you have felt the following: 1 = slightly, not at all to 5 = Extremely	2.92	1.19	303

## References

- Arjona, Ana M., and Stathis N. Kalyvas. 2011. *Recruitment Into Armed Groups in Colombia: A Survey of Demobilized Fighters*. London: Palgrave Macmillan.
- Bayer, Christophe Pierre, Fionna Klasen, and Hubertus Adam. 2007. "Association of Trauma and PTSD Symptoms with Openness to Reconciliation and Feelings of Revenge among Former Ugandan and Congolese Child Soldiers." *Jama* 298(5): 555-559.
- Bartlett, Frederic Charles. 1932. *Remembering: A Study in Experimental and Social Psychology*. Cambridge, UK: Cambridge University Press.
- Beath, Andrew, Fotini Christia, and Ruben Enikolopov. 2013. "Empowering Women Through Development Aid: Evidence from a Field Experiment in Afghanistan." *American Political Science Review* 107(3): 540-557.
- Berkowitz, Leonard. 1989. "Frustration-aggression hypothesis: examination and reformulation." *Psychological Bulletin* 106 (1): 59.
- Berman, Eli, Jacob N. Shapiro, and Joseph H. Felter. 2011. "Can hearts and minds be bought? The economics of counterinsurgency in Iraq." *Journal of Political Economy* 119(4): 766-819.
- Blattman, Christopher, and Jeannie Annan. 2016. "Can Employment Reduce Lawlessness and Rebellion? A Field Experiment with High-Risk Men in a Fragile State." *American Political Science Review* 110(1): 1-18.
- Buhaug, Halvard, Lars-Erik Cederman, and Kristian Skrede Gleditsch. 2014. "Square Pegs in Round Holes: Inequalities, Grievances, and Civil War." *International Studies Quarterly* 58(2): 418-431.
- Bullock, Will, Kosuke Imai, and Jacob Shapiro. 2011. "Statistical Analysis of Endorsement Experiments: Measuring Support for Militant Groups in Pakistan." *Political Analysis* 19 (4): 363-384.
- Cederman, Lars-Erik, Nils B. Weidmann, and Kristian Skrede Gleditsch. 2011. "Horizontal Inequalities and Ethnonationalist Civil War: A Global Comparison." *American Political Science Review* 105(3): 478-495.
- Cederman, Lars-Erik, Kristian Skrede Gleditsch, and Halvard Buhaug. 2013. *Inequality, Grievances, and Civil War*. Cambridge University Press.
- Chagnon, Napoleon A. 1988. "Life Histories, Blood Revenge, and Warfare in a Tribal Population." *Science* 239(4843): 985-992.
- Collier, Paul, and Anke Hoefler. 2004. "Greed and Grievance in Civil War." *Oxford Economic Papers* 56(4): 563-595.

- Collier, Paul, Anke Hoeffler, and Måns Söderbom. 2004. "On the Duration of Civil War." *Journal of Peace Research* 41(3): 253-273.
- Condra, Luke N., and Jacob N. Shapiro. 2012. "Who Takes the Blame? The Strategic Effects of Collateral Damage." *American Journal of Political Science* 56(1): 167-187.
- Costalli, Stefano and Andrea Ruggeri. 2015. "Indignation, Ideologies, and Armed Mobilization: Civil War in Italy, 1943–45." *International Security* 40(2): 119-157.
- Cunningham, David E. 2006. "Veto Players and Civil War Duration." *American Journal of Political Science* 50(4): 875-892.
- Cunningham, Kathleen Gallagher. 2013. "Actor Fragmentation and Civil War Bargaining: How Internal Divisions Generate Civil Conflict." *American Journal of Political Science* 57(3): 659-672.
- Davenport, Christina, Will Moore, and Steven Poe. 2003. "Sometimes You Just Have to Leave: Domestic Threats and Forced Migration, 1964-1989." *International Interactions* 29 (1): 27-55
- Denny, Elaine K., and Barbara F. Walter. 2014 "Ethnicity and Civil War." *Journal of Peace Research* 51(2): 199-212.
- Doyle, Michael W., and Nicholas Sambanis. 2000. "International Peacebuilding: A Theoretical and Quantitative Analysis." *American Political Science Review* 94 (4): 779-801.
- Fair, C. Christine, Neil Malhotra, and Jacob N. Shapiro. 2010. "Islam, militancy, and politics in Pakistan: Insights from a national sample." *Terrorism and Political Violence* 22 (4): 495-521.
- Fearon, James D., and David D. Laitin. 2003. "Ethnicity, Insurgency, and Civil War." *American Political Science Review* 97(1): 75-90.
- Fortna, Virginia Page. 2004. "Does Peacekeeping Keep Peace? International Intervention and the Duration of Peace After Civil War." *International Studies Quarterly* 48 (2): 269-292.
- Gordon, Michael E., and Sandra J. Miller. 1984. "Grievances: A Review of Research and Practice." *Personnel Psychology* 37(1): 117-146.
- Gurr, Ted Robert. 1970 *Why Men Rebel*. Princeton, NJ: Princeton University Press.
- Harris, Celia B., Helen M. Paterson, and Richard I. Kemp. 2008. "Collaborative Recall and Collective Memory: What Happens When We remember Together?" *Memory* 16 (3): 213-230.
- Hashemi, Nader, and Danny Postel, eds. 2013. *The Syria Dilemma*. MIT Press.
- Heydemann, Steven. 1999. *Authoritarianism in Syria: Institutions and social conflict, 1946-1970*. Ithaca: Cornell University Press.

- Humphreys, Macartan, and Jeremy M. Weinstein. 2008. "Who fights? The Determinants of Participation in Civil War." *American Journal of Political Science* 52 (2): 436-455.
- Kalyvas, Stathis N. 2006. *The Logic of Violence in Civil War*. Cambridge University Press.
- Kalyvas, Stathis N., and Laia Balcells. 2010 "International System and Technologies of Rebellion: How the End of the Cold War Shaped Internal Conflict." *American Political Science Review* 104(3): 415-429.
- Karl, R., and David Sobek. 2004 "The Dynamics of Civil War Duration and Outcome." *Journal of Peace Research* 41(3): 303-320.
- Knutson Brian. 2004. "Sweet Revenge." *Science*. 305(5688):1246-7.
- Krueger, Alan B., and Jitka Maleckova. 2003. "Education, Poverty and Terrorism: Is There a Causal Connection?" *The Journal of Economic Perspectives* 17 (4): 119-144.
- Levine, Linda J. 1997. "Reconstructing Memory for Emotions." *Journal of Experimental Psychology: General* 126 (2):165-177.
- Levine, Linda J., Vincent Prohaska, Stewart L. Burgess, John A. Rice, and Tracy M. Laulhere. 2001. "Remembering Past Emotions: The Role of Current Appraisals." *Cognition & Emotion* 15 (4): 393-417.
- Loftus, Elizabeth F.1992."When a Lie Becomes Memory's Truth: Memory Distortion After Exposure to Misinformation." *Current Directions in Psychological Science* 1: 121-123.
- Lyall, Jason. 2009. "Does Indiscriminate Violence Incite Insurgent Attacks? Evidence from Chechnya." *Journal of Conflict Resolution* 53(3): 331-362.
- Lyall, Jason, Graeme Blair, and Kosuke Imai. 2013. "Explaining Support for Combatants During Wartime: A Survey Experiment in Afghanistan." *American Political Science Review* 107 (4): 679-705.
- Lyall, Jason, Yuki Shiraito, and Kosuke Imai. 2015."Coethnic Bias and Wartime Informing." *APSA 2013 Annual Meeting Paper. Journal of Politics* forthcoming.
- McCullough, Michael E., Robert Kurzban, and Benjamin A. Tabak. 2015. "Cognitive Systems for Revenge and Forgiveness." *Behavioral and Brain Sciences* 36(1): 1-15.
- Miller, Richard E., and Austin Sarat. 1980. "Grievances, Claims, and Disputes: Assessing the Adversary Culture." *Law and Society Review* (1): 525-566.
- Moore, Will H., and Stephen M. Shellman. 2004. "Fear of Persecution Forced Migration, 1952-1995." *Journal of Conflict Resolution* 48 (5): 723-745.

- Moore, Will H., and Stephen M. Shellman. 2006. "Refugee or Internally Displaced Person? To Where Should One Flee?" *Comparative Political Studies* 39 (5): 599-622.
- Moore, Will H., and Stephen M. Shellman. 2007. "Whither Will They Go? A Global Study of Refugees' Destinations, 1965–1995." *International Studies Quarterly* 51(4): 811-834.
- O'Donnell, Guillermo A. 2004. "Why the Rule of Law Matters." *Journal of Democracy* 15(4): 32-46.
- Orth, Ulrich, Leo Montada, and Andreas Maercker. 2006. "Feelings of revenge, retaliation motive, and posttraumatic stress reactions in crime victims." *Journal of Interpersonal Violence* 21(2): 229-243.
- Parkinson, Sarah Elizabeth. 2013. "Organizing Rebellion: Rethinking High-Risk Mobilization and Social Networks in War." *American Political Science Review* 107 (3): 418-432.
- Petersen, Roger D. 2002. *Understanding Ethnic Violence: Fear, Hatred, and Resentment in Twentieth-Century Eastern Europe*. Cambridge: Cambridge University Press.
- Pierret, Thomas. 2013. *Religion and State in Syria: The Sunni Ulama from Coup to Revolution*. Vol. 41. Cambridge University Press.
- Safer, Martin A., George A. Bonanno, and Nigel P. Field. 2001. "'It Was Never That Bad': Biased Recall of Grief and Long-term Adjustment to the Death of a Spouse." *Memory* 9 (3): 195-203.
- Safer, Martin A., Linda J. Levine, and Amy L. Drapalski. 2002. "Distortion in Memory for Emotions: The Contributions of Personality and Post-event Knowledge." *Personality and Social Psychology Bulletin* 28 (11): 1495-1507.
- Salehyan, Idean, and Kristian Skrede Gleditsch. 2006. "Refugees and the Spread of Civil War." *International Organization* 60(2): 335-366.
- Seale, Patrick. 1986. "The Struggle for Syria: A Study of Post-war Arab Politics, 1945–1958, new edition." *London: IB Tauris*.
- Schumann, Karina, and Michael Ross. 2010. "The Benefits, Costs, and Paradox of Revenge." *Social and Personality Psychology Compass* 4(12): 1193-1205.
- Shapiro, Jacob N. and Nils B. Weidmann 2015. "Is the Phone Mightier Than the Sword? Cellphones and Insurgent Violence in Iraq." *International Organization* 69(2): 247-274.
- Snyder, Jack, and Leslie Vinjamuri. 2006. *Trials and Errors: Principle and Pragmatism in Strategies of International Justice*. Cambridge: MIT Press.

Souleimanov, Emil Aslan, and Huseyn Aliyev. 2015. "Blood Revenge and Violent Mobilization: Evidence from the Chechen Wars." *International Security* 40(2): 158-180.

Syrian Center for Policy Research (SCPR). 2016. "Syria: Confronting Fragmentation! Impact of Syrian Crisis. Quarterly Report, 2015." February, 2016. Received from <http://scpr-syria.org/publications/policy-reports/confronting-fragmentation/>

Tsang, Jo-Ann. 2002. "Moral Rationalization and the Integration of Situational Factors and Processes in Immoral Behavior." *Review of General Psychology* 6(1):25-50.

Watson, David, and Lee Anna Clark. 1999. "The PANAS-X: Manual for the positive and negative affect schedule-expanded form." 8-1-1999. University of Iowa.

Weinstein, Jeremy M. 2006. *Inside Rebellion: The Politics of Insurgent Violence*. Cambridge University Press.

Whitehouse, Harvey, Brian McQuinn, Michael Buhrmester, and William B. Swann. 2014. "Brothers in Arms: Libyan Revolutionaries bond like Family." *Proceedings of the National Academy of Sciences* 111(50): 17783-17785.

Wood, Elisabeth Jean. 2003. *Insurgent Collective Action and Civil War in El Salvador*. Cambridge University Press.