

An officer looks on as a Peshmerga who is fresh from sniper training with the anti-ISIS coalition demonstrates his new weapon. Photo by Brigadier General Hazhar Ismail/used with permission

In *Trained to Win? Evaluating Battlefield Effectiveness and Sociopolitical Factors among Partnered Forces*, Matthew Cancian offers a much-needed framework for evaluating the effectiveness of Special Operations Forces (SOF) in the effort to professionalize partner forces. The author proposes that structured surveys related to tactically oriented training outcomes can yield significant information about partnered forces' evolution over time. Since SOF often operate in politically sensitive or denied environments, it becomes all the more necessary to conduct the kind of research he describes in this monograph to assess the best strategies for improving partner capabilities while recognizing the limitations imposed by their sociopolitical realities. Effectiveness is ultimately a political as well as military condition, and in this monograph Matthew Cancian offers an excellent approach to evaluating both.

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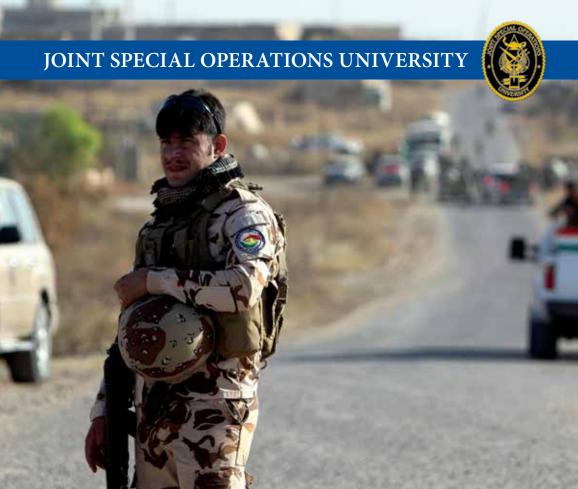
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Trained to Win? Evaluating Battlefield Effectiveness and Sociopolitical Factors among Partnered Forces

Matthew Cancian

JSOU Report 21-8

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Contents

Foreword	vii
About the Author	. ix
Introduction	1
Chapter 1. Combat Motivation → Battlefield Participation → Combat Effectiveness	
Chapter 2. The Surveying Model for Evaluating Battlefield Participation	21
Chapter 3. Counterarguments and Alternative Explanations Do Not Satisfactorily Explain Variation in Battlefield Participation	27
Chapter 4. Can the U.S. Professionalize Partner Forces?	37
Chapter 5. Empirical Results for Professionalizing the Peshmerga	53
Conclusion. The Defeat of ISIS and Support to Resistance Outside of Europe—Lessons for the Future	63
Appendix 1. A Brief Description of the Kurds Represented in this Study	67
Acronyms	89
Endnotes	91

Foreword

Whether related to counterterrorism or Great Power Competition, the future operating environment demands that the U.S. contribute to highly capable allied, partner, and, sometimes, proxy forces. U.S. Special Operations Forces' (SOF) role in this effort will need to generate more enduring strategic effect given the strain these two challenges are likely to produce on the enterprise. Measuring the effectiveness of security force assistance and unconventional warfare SOF efforts has always been difficult and often dependent upon the subjective evaluations of commanding officers. The extent to which the professionalization of the partnered forces occurs is even more difficult to ascertain in many respects, but this aspect is crucial for sustainable strategic effect deriving from the tactical actions of SOF.

In Trained to Win? Evaluating Battlefield Effectiveness and Sociopolitical Factors among Partnered Forces, Matthew Cancian offers a much-needed framework for evaluating the effectiveness of SOF in the effort to professionalize partner forces. Cancian proposes that structured surveys related to tactically oriented training outcomes can yield significant information about partnered forces' evolution over time. The innovation Cancian introduces is an approach for designing the surveys in such a way as to presume and account for social desirability bias. That is, the surveys are specifically designed to identify differences in politically sensitive or performance-oriented responses that might normally induce a respondent to give the socially acceptable answer instead of the truthful one. Due to the limitations of time and space, Cancian demonstrates the value of this approach through the lens of battlefield effectiveness among the Kurdish Peshmerga in Iraq. However, the same approach could be applied across a range of military and sociopolitical issues and partnered forces.

Perhaps the most important insight revealed by Cancian's empirical results is the difficulty associated with creating a unified identity among partnered forces even when faced with a common existential threat. The Peshmerga's political loyalties were found to vary depending on their respective identities, and Cancian assesses that professionalization of the partnered force consequently suffered. If fomenting a common identity proved highly problematic in this situation with a secure rear area for training, he wonders,

what might happen in a resistance environment dominated by the enemy? Since SOF often operate in politically sensitive or denied environments, it becomes all the more necessary to conduct the kind of research he describes in this monograph to assess the best strategies for improving partner capabilities while recognizing the limitations imposed by their sociopolitical realities.

In this spirit, Cancian's empirical results at the tactical level advance discourse captured in other JSOU Press publications on Security Force Assistance at the strategic level. In *Defense Institution Building ... by Design*, Dr. Richard Newton describes the U.S. government's problems with maintaining the professionalization of partnered forces and suggests that locally cocreated and sustainable institutions might demonstrate greater long term capability than ones resembling U.S. structures. Relatedly, *Advancing SOF Cultural Engagement: The Malinowski Model for a Qualitative Approach* by Robert R. Greene Sands and Darby Arakelian, provides crucial concepts for generating the right questions to ask partnered forces through structured surveys. Effectiveness is ultimately a political as well as military condition, and in this monograph Matthew Cancian offers an excellent approach to evaluating both. Should the approach be broadly adopted and continued over time, SOF will benefit from deep, longitudinal analysis and more effective operations with partner, allied, and proxy forces.

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About the Author

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psychology, particularly in the case of the Kurds of Iraq. Before beginning his PhD, Cancian served in the United States Marine Corps from 2009 to 2013. He deployed to Sangin, Afghanistan, in support of Operation Enduring Freedom, acting as a forward observer. He has also earned a master of arts in law and diplomacy from the Fletcher School at Tufts. He is a nonresident fellow at the Modern War Institute at West Point.



Introduction

The first humvee¹ laid down suppressive fire from behind a sand berm with its .50 caliber heavy machine gun; the other humvee then advanced to the next fold in the sand, braked hard, and took up the thundering cadence with its weapon. The first humvee used that suppression to resume its advance, and they continued their alternating advance down a football field length of the Iraqi desert. It was a classic display of fire and movement: using suppressive fire, cover, and concealment to advance against an enemy position.² These principles were developed in World War I, yet were new to these Kurdish fighters, called 'Peshmerga,' recently trained by Dutch Special Forces. The multinational observers clapped after the demonstration, held near Mosul Dam during the war with the Islamic State of Iraq and Syria (ISIS). Does this training help in combat, though? 'Oh yes, we were surprised, but it really worked. We can now launch attacks that before cost lots of blood,' one Peshmerga told the author after the ceremony, detailing a recent attack they made.³

Aximizing partner effectiveness is critical to building effective resistance movements. Resistance to occupying forces with powerful conventional forces will become increasingly important as American global hegemony is challenged by a rising China and a revanchist Russia. Instead of being able to dominate contested spaces with conventional forces, the U.S. will have to enable partner forces to resist occupation. Previous monographs from the Joint Special Operations University (JSOU) have explored historical cases of support to resistance or the theoretical basis of building partner capacity. This monograph builds on previous contributions by investigating the case of Kurdish resistance to ISIS in Iraq.

The focus of this study is on understanding the effect of U.S. training on partner forces at the outcome level. While this is less ambitious than understanding the impact of training, it will not be easy. Quantitative measures of partner training have previously focused on inputs and outputs; outcomes are typically measured by the subjective opinion of an expert (e.g., a general officer in charge of a program). Scientific measurement of outcomes need

not supplant expert opinion; instead, the author offers this method as a complementary method to expert opinion.

The main research question asks: Does SOF training of partner forces improve U.S. partners' combat effectiveness? A related subordinate question is, How can the U.S. measure the performance of partner force training? Due to the attack by ISIS on the Kurdistan region of Iraq, a coalition of Western countries trained tens of thousands of Kurdish Peshmerga in basic tactics such as in the opening vignette. To engage these research challenges, this study uses an empirical case study method and asks, How successful was SOF training at improving the Kurdish Peshmerga's battlefield performance? Based on a field survey of Peshmerga, the author concludes that the coalition efforts to teach basic battlefield tactics improved the Peshmerga's battlefield performance.

In addition, the study explores how sociopolitical factors and unit formation contribute to the effectiveness of security force assistance (SFA) and unconventional warfare (UW). The study's second research question asks: Can SOF professionalize their partner forces around the world? Separate from the efforts to increase the Peshmerga's battlefield performance was a U.S. initiative to professionalize the Peshmerga. Their corresponding political parties controlled the military units of the Peshmerga before a U.S. initiative was created to integrate certain brigades into apolitical formations that reported to a unified government ministry. Were these efforts successful? Based on the survey data, the author contends that even extensive professionalization efforts only have a marginal impact. The U.S. partner forces will mirror its partners' government or political arrangement; attempting to change the military without changing the whole system of government or inter-party bargaining is unlikely to be successful.

A key conclusion of the study is that sociopolitical factors must be very well understood and incorporated into the design of SFA and UW engagement with partnered forces to achieve the best results. While the successful techniques from this case study could be replicated to enable other partners to succeed in future resistance missions, the most important time to discover the subtleties and nuances of sociopolitical difference is well before the start of armed conflict. Indeed, especially where adversaries seek to divide or reinforce a partner along ethno-sectarian or other lines of identity, determining these factors and accounting for them in advance are essential contributors to effective resistance operations.

Different sections of this monograph will be useful to different people; as such, the author has written them to stand alone for different audiences. The planner at the United States Central Command that is interested in understanding the various Kurdish factions will benefit from appendix 1 and can comfortably skip chapters 2-3 or chapters 4-5. Conversely, the advisor at the United States Africa Command can focus on the metrics of partnership training from chapters 1-5 without having to wade through the details of Kurdish family trees in appendix 1. Whatever the reader's interest, the author hopes that this monograph will help them think about the challenges facing American national security in an era of increasing complexity.

Improving Partner Combatants: How Does the U.S. Know If It Is Accomplishing the Mission?

Not all training is good training. The contrast between good and bad training by the anti-ISIS coalition was apparent in northern Iraq. In one area, the coalition partner was teaching urban combat. The trainers, speaking through interpreters, were professional and direct. While they were not rude, they did not allow the Peshmerga to get distracted and talk amongst themselves. Standing on a catwalk overlooking the cinder block training house, the author could see the finished product. While the Peshmerga did not flow through the rooms in the same way as American SOF would, they could stack up and enter a room with each man orienting on a different corner. In contrast, the internal training that was not run by the Westerners focused on impractical skills. Older Peshmerga had recruits zip line down from a tower while firing their AK-47 into the distance. While this looked impressive, it did not build the skills that would make for confident warriors.

The way that training is conducted affects the way that soldiers fight. Anyone who has been in the U.S. military can compare their pretraining ignorance with their acquired tactical skills and conclude that the training made a difference. 'Train Hard, Fight Easy' is a common maxim because of its intuitive truth.

Not all militaries get effective training, however. Foreign militaries do not just lack the equipment and technology that the U.S. military has; often, they also lack the human capital. Individuals are generally less educated; in Afghanistan, for example, despite spending hundreds of millions of dollars on literacy training, the majority of the force was not fully literate in their

mother tongue.⁷ However, even in foreign militaries with adequate human capital, knowledge of basic tactical and operational skills might be lacking. Furthermore, conditions in foreign countries outside of the military might prevent their effective training; for example, in countries with histories of *coup d'états*, civilian leaders fear the assembly of troops for exercises as they might be hijacked for a new coup attempt. Even outside of politics, foreign militaries might lack experts who know what effective tactics are. For American veterans, the basics of shoot, move, and communicate seem to be instinctual. They can be dumbfounded at the poor tactics of partners, forgetting the years of training that they received. In foreign militaries without experts who have mastered the tactics, techniques, and procedures of modern warfare, it is impossible to pass them on to new recruits.

The U.S. military relies on training programs to support resistance to hostile regimes and build the capacity of allied governments. The U.S. military possesses high human capital, a professional tradition, and, especially now, high numbers of combat veterans; all these are often lacking in its partners. By training its partners, the U.S. acts as a force multiplier in achieving its strategic aims. SOF in particular have a well-deserved reputation for transforming disorganized partners into effective tacticians.⁸

However, the U.S. does not always succeed in producing combat effective partner forces. Successes like the People's Protection Units (YPG) and Syrian Democratic Forces (SDF) in Syria can be directly contrasted with failures in neighboring Iraq. There, the U.S. trained and equipped the Iraqi Army, which subsequently melted away when attacked by a small number of ISIS fighters in 2014. The U.S. has attempted to build partner militaries in a variety of different contexts resulting in a range of outcomes.⁹

How can the U.S. tell if its training is working at the tactical level? If only the overall course of the campaign is judged, then tactical failures might be blamed when the problems were operational or strategic. In the case of the Iraqi Army and ISIS in 2014, perhaps the Iraqi Army was defeated because it had poor tactics; but, perhaps, it was defeated because of poor operational control. Of course, the U.S. could make the opposite mistake—the U.S. could believe that the YPG and SDF defeated ISIS because of the tactical skill they acquired from its training; on the other hand, they could have won through overwhelming numbers, coalition fire support, or U.S.-supplied equipment while being no more tactically proficient than they were before the U.S. trained them. When considering the overall results of a campaign

with several interconnected efforts, it can be hard to isolate the effects of any one effort (e.g., the effect of training on tactics). The outcome of one line of effort interacts with too many factors to produce a separable impact on the conflict.

To help SOF determine the effectiveness of their training under SFA and UW, this study offers one method—a survey of partner soldiers—to move the training of partner forces from an art of war to a science of war and understand if the U.S. is achieving the outcome it desires. In the summer of 2017, during the war with ISIS, the author worked with a group of Kurdish academics to survey 2,301 Peshmerga. The surveyors asked about the Peshmerga's training and their combat experiences in order to learn more about the connection between the two.

In the case of the Peshmerga, training was effective at increasing confidence in combat readiness and at encouraging battlefield participation. Battlefield participation for the purpose of this study is defined as attempting to defeat the enemy when under fire (as opposed to nonparticipation by either fleeing or hiding). Battlefield participation can vary among untrained sol-

diers. Seventeen percent of Peshmerga without coalition training did not participate in battle, compared to almost none of the coalition trained Peshmerga. In the case of the Peshmerga, coalition training was effective

Battlefield participation can vary among untrained soldiers.

in producing the desired effect of increased tactical prowess. This likely had the impact of contributing to the Peshmerga's victories against ISIS, although this assertion is impossible to determine conclusively.

A partner survey is a powerful tool for understanding a specific problem, but it is not all-powerful. The partner survey should be used as a tool by SOF for understanding if the training is producing the desired outcome. Questions such as, Is tactical ineffectiveness the main weakness of our partner? or, Why did this partner learn effectively when this other partner did not? are beyond the scope of a single partner survey. A program to tie training missions to survey evaluations could build up a database to understand these questions. Even in the absence of such an effort, however, this study can help readers think through these questions in a systematic way.

Mastering Metrics: Is the U.S. Doing a Good Job?

An Army officer once shared stories from Afghanistan with a think tank in Washington, D.C. One such story described his unit's efforts to combat the Ebola epidemic in West Africa. He explained that by simply changing the threat vector in their mission from insurgents to the disease, they felt prepared. One year later, Ebola had been eradicated from Liberia. This officer was absolutely certain of the connection between his unit's deployment and the containment of Ebola in Liberia. It is certain that the U.S. military accomplished a lot; on the Department of Defense website, they cite the number of health care workers trained, the number of blood samples tested, and the dollars spent.¹⁰ But does this really tell the U.S. about the impact of its mission? What was the relative impact of the U.S. military compared to the 40 other international organizations involved in containing the spread of Ebola?¹¹ If the U.S. believes the Army officer's causal linkage between U.S. force deployment and the end of Ebola, it should send troops to the sites of future pandemics without further training; if that is not the case, however, that would be a bad policy decision. To inform military policy, the U.S. must understand relations of cause and effect.

The goal of science is to understand causal relationships—what is the effect of X on Y? If an apple is dropped, then it will fall. The link between X and Y is called the mechanism. In the case of the apple, the mechanism is gravity.

An important element of the causal relationship is the necessary conditions under which the X-Y relationship holds true. In the case of the falling apple, the most important necessary condition is that the apple fell on Earth where there is gravity. It is hard to distinguish necessary conditions, however, from incidental conditions. During Isaac Newton's encounter with a falling apple, almost none of the conditions present were necessary for causing the apple to fall. For example, he was in England; the apple would have fallen just as well in India, however. It happened during the day, yet it would have happened just the same at night. There was a person under the tree, yet it would have fallen had there not been someone there. Scientists can discover the necessary conditions by replicating the X-Y relationship in experiments that change conditions: first dropping an apple at night (to show that daylight is not necessary), then in India (instead of England), and finally without a person under the tree.

However, it is often impossible to conduct experiments in social science. Take the example, What was the effect of disbanding the Iraqi Army on the formation of the Iraqi insurgency? The U.S. can never run an experiment where it invades Iraq but keeps the Iraqi Army intact. This is called the fundamental problem of causal inference; the outcome that actually occurred can be observed, but the outcome that did not occur (called a counterfactual) can never be observed. To assert that the insurgency occurred after the dissolution and was therefore caused by the dissolution is a logical fallacy called *post hoc ergo propter hoc*—after this, therefore because of this. For this reason, politicians and soldiers are often forced to rely on intuition versus scientific certainty. However, there are some areas of warfare that are more amenable to scientific understanding than others.

The science of war is stronger at lower levels and for material problems. For example, what is the effect of adding a 50 lb. load to the movement speed of an infantry platoon? An experiment can be conducted by having infantry platoons hike several times with variations in the conditions of weather and terrain. At higher levels of warfare, where uncertainty and friction make scientific understanding impossible, the understanding of war will be more of an art and less of a science.

In this monograph, the author argues that the U.S. can move the training of partner forces from an art, as it has previously been, to a science. The author advocates for surveying partner force soldiers in order to better understand the effect that U.S. training has on battlefield participation. The author will demonstrate the potential of this method with a survey of 2,301 Kurdish fighters (Peshmerga) during their war against ISIS. By replicating this technique in other contexts, the U.S. can better understand what conditions make its training effective and thus more efficiently shape U.S. policy.

It is important to not overstate the causal relationships that are uncovered in this research. These results of causal relations can therefore be divided between input, output, outcome, and impact. This division between input, output, outcome, and impact has gained currency in a variety of fields, including in security sector reform (SSR).¹² Inputs are the raw materials that are expended for the mission; outputs are the immediate products of the mission; outcomes are the objectives that the mission is designed to accomplish; and finally, impacts are the connection between the mission's objectives and the overall course of the campaign. Table 1 gives some illustrative examples.

Table 1. Programs evaluated as inputs, outputs, outcomes, and impacts. Source: Author

	Input	Output	Outcome	Impact
Definition	The raw materials that are expended for the mission	The immediate products of the mission	The objectives that the mission is designed to accomplish	The connection between the mission's objectives and the overall course of the campaign
Conventional Attack	One platoon, a direct support artillery battery	The hill was seized, enemy squad destroyed	Hill was used for observation of enemy positions, denied for enemy use	Accurate fire support directed from the hill contributes to victory in the battle
Anti-Ebola Campaign	\$330 million spent, 4,000 soldiers deployed	10 Ebola treatment units built, 4,709 blood samples tested ¹³	Fewer people contract Ebola	Ebola is eradi- cated in Liberia
Security Force Assistance	Soldiers deployed, equipment given, dollars spent	Number of partner soldiers trained	Partner soldiers participate more in battle	Partner soldiers are successful in their conflict
Level of Certainty	Highest	High	Medium-low	Lowest

From the examples in table 1, it is apparent that it is easiest to describe the inputs and outputs of military operations. Inputs, such as the dollars spent and troops deployed, are easily quantifiable; the output that they produce, such as sorties flown or partners trained, is only slightly harder. Some outcomes, such as tangible objectives in conventional battles, are relatively easy to measure; most of the time, however, outcomes require serious analysis and independent study to quantify. The broader impacts, even with scrupulous analysis, may be unknowable; the impact of airpower on the outcome of Desert Storm, for example, remains contested. Impacts inherently involve a higher level of analysis and less material criteria; as mentioned previously, these make the science of war less certain.

Research Method

The author surveyed 2,301 Peshmerga in the summer of 2017, while the war against ISIS was ongoing, to investigate the relationship between training and battlefield participation. The author hired and trained four teams of five university professors and students from local Kurdish universities to conduct the survey. Besides working in the four *de jure* governorates of the Kurdistan region (Dahuk, Arbil, Halabjah, and Al-Sulaymaniyah), Peshmerga were surveyed in the Kirkuk and Ninawa governorates, which are part of the disputed territories between the Kurds and the central Iraqi government. The survey teams sampled respondents at the cluster level of bases, selecting bases that directly supported either the defense against ISIS or guarded the border with the Iraqi government.

The average participant was 34 years old, male (98 percent of the sample), Muslim (97 percent), literate (82 percent), and identified with a tribe (93 percent). He had served for 14 years in the Peshmerga, and when he went home during his two weeks on, two weeks off rotation, his household had two people sleeping in each room (excluding kitchens and bathrooms). He had been in a small arms fire exchange (79 percent) as a rifleman (64 percent of combat veterans) and had served in territory once occupied by ISIS (76 percent). His highest educational attainment was primary school (30 percent), and he had grown up in one of the three principal provinces of Kurdistan—Arbil, Al-Sulaymaniyah, or Dahuk (27, 28, and 25 percent respectively).

As to the independent variable of training status (the X in the effect of X on Y), the sample was balanced: 35.5 percent (n = 818) of Peshmerga reported that they had received coalition training, 30.9 percent (n = 712) had received formal training from other Peshmerga but not from the coalition, and 32.7 percent (n = 753) had not been formally trained by either the coalition or other Peshmerga. 15

How can the dependent variable of battlefield participation (the Y in the effect of X on Y) be measured? One measure of the effect of training is whether Peshmerga felt ready for combat or not; those who were more confident in their combat readiness are assumed to be more likely to participate in battle. Peshmerga were asked: On a scale of zero to ten, how confident are you in your unit's readiness for combat?

Directly asking Peshmerga about their battlefield participation would not have been accurate because of social desirability bias—the inclination

of survey respondents to lie by answering what people are supposed to think rather than what they really think. Theoretically, battlefield participation could be measured through drone or satellite records of combat; short of that, it is necessary to rely on self-reports that suffer from social desirability bias. Combat is one of the most stressful, emotionally charged experiences that women and men can experience. Grossman argues that most humans have a deep-seated revulsion to killing fellow humans and that when this aversion is overcome through social pressures, most soldiers go through stages of emotional reactions like the reactions to having a life-threatening disease (denial, anger, bargaining, depression, and acceptance).¹⁶ Besides the individual's emotional baggage, there is a social desirability bias for soldiers to say that they were active and even eager participants in combat. During the author's time in the Marine Corps, one of the most coveted awards was the Combat Action Ribbon, which was earned by individuals who not only were engaged by enemy forces but who "rendered satisfactory performance under enemy fire."17 Soldiers perceive nonparticipation as dishonorable and thus are biased to deny it.

Previous studies of combat motivation have utilized in-depth interviews to get around the social desirability bias associated with combat motivation. A long, drawn-out interview process near the site of combat with a fellow soldier (such as by Wong et al.) could build the trust needed to allow soldiers to answer honestly. Recent research using interviews is better documented than earlier efforts, such as by Marshall, but still suffers from the problem that a long trust-building phase means that few subjects can be interviewed.

To obviate social desirability without lengthy trust building, the author used a survey list experiment to measure self-reported battlefield participation. First developed in the 1990s to measure racial biases in the U.S., survey list experiments avoid social desirability bias by allowing respondents to convey information about undesirable attitudes without explicitly expressing them. Subjects in the control group are given a list of nonsensitive items and are asked how many of them they agree with, but they are not required to explicitly state which ones they agree with; those in the treatment group are given the same control list plus some sensitive items that social desirability bias would preclude them from explicitly agreeing with. As respondents do not have to explicitly agree with the sensitive items, being simply asked how many items they agree with, they are able to indirectly transmit information about their beliefs on the sensitive items about which there is a social

desirability bias without personally incriminating themselves. By comparing group means between the control and treatment groups, the results show if subjects are agreeing with the sensitive items. Essentially, this measures the same thing at a group level as asking individuals, Did you hide in combat? The trade-off for losing the individual-level data is inducing people to be more truthful with their answers through the anonymity that the indirect questioning offers.

The author presented the following survey list experiment to Peshmerga who had been in combat and who were riflemen (n=1,147).

How many of the following describe your experience of combat?

- There was a lot of noise.
- The situation was confusing.
- When we were under fire, I did not fire back but just waited for it to be over.

The third item was only included for respondents who were randomly assigned to the treatment condition. By comparing the numbers given by the control group with the first two items and the sensitive group with all three items, the results depict how many Peshmerga are declining to participate on the battlefield by hiding.

Chapter Overview

In chapter 1, the author reviews theories of combat effectiveness and motivation, provides a theory about how training increases effectiveness, and concludes with a brief overview of the history of Peshmerga training. Chapter 2 provides the empirical data on battlefield participation based on the survey. It discusses the tactical training of the Kurds and its effectiveness before considering the conditions that enabled this success. Chapter 3 evaluates counterarguments that could explain the results and demonstrates why the results from chapter 2 offer a more compelling explanation. Chapter 4 starts the exploration of whether the U.S. can professionalize a partnered force in the midst of armed conflict. This is especially important given the factionalized nature of Kurdish political parties and military units. Such conditions are likely to be replicated in other environments. Chapter 5 provides the empirical results on the attempt to professionalize the Kurdish Peshmerga. In the conclusion, the author discusses the implications of the findings of

JSOU Report 21-8

the two research questions and applies the insights from the case study to future SFA and UW for resistance efforts outside the European context.

Finally, appendix 1 provides a brief history of Iraqi Kurds, their political parties, and their intra-ethnic tensions. The decision to place this sociopolitical history in the appendix results from the fact that many SOF have direct experience with the population due to years of deployment to Iraq. Since the monograph is about evaluating training for SFA and UW, it was decided the flow of the text would be interrupted by an early background chapter on the population in the case study. For those without solid background on the population, it is recommended that the appendix be reviewed first before commencing with chapter 1. Otherwise, the text assumes familiarity with the Kurds and the Peshmerga.

Chapter 1. Combat Motivation → Battlefield Participation → Combat Effectiveness

Insha' Allah. Any American who has dealt with Middle Eastern partners has heard this phrase. While it literally means "if God wills," its practical significance varies. Sometimes it is devoid of meaning, simply acknowledging that the future is being discussed. To Americans, it represents a polite but evasive no. 19 If you asked, "Will you go on patrol with U.S. tomorrow morning?" and your Iraqi counterpart said, "Insha' Allah," you would not expect to see them by the gate at 0600. While the reasons behind their refusal can vary, the net result is the same—they refuse to participate in battle. Getting U.S. partners to show up on the battlefield was a significant struggle in the conflicts in Iraq and Afghanistan. To understand how the U.S. can improve the combat performance of its partners, it must start by examining why people, in general, participate or do not in battle. It is important to make sense of a variety of complicated terms in order to understand this complicated issue.

To understand any causal relationship between X and Y, it is necessary to understand what the definitions of what X and Y are. A debate over whether the U.S. invasion of Iraq in 2003 led to victory, for example, would make no sense if the definition of victory was not agreed on by all parties. For this monograph, the definitions of combat motivation, cohesion, combat effectiveness, and a new term that the author defined previously, battlefield participation, need to be consistent. Besides difficulties of measurement, changing terms and inconsistent definitions have bedeviled previous work to understand why soldiers face the mortal dangers of combat. The author presents a unified framework with definitions that avoid overlap, are logically linked, and fit previous literature as much as possible.

The author defines combat motivation as the reasons why soldiers under fire believe that they should continue fighting. Despite voluminous writing on combat motivation, past definitions are unsatisfactory. Wong et al., for example, defined combat motivation as, "Why do soldiers fight?" This definition is parsimonious but ambiguous. The definition that the author

proposed previously is consistent with Wong et al.'s usage while clarifying that it is neither a statement of effectiveness nor is it a measure of why soldiers decide to become combatants in the first place. Combat motivation, being a property internal to individuals, does not lend itself to an obvious measure other than self-reporting.

Combat motivation has both a type of motivation and a degree of strength. That type of motivation can be measured by whether soldiers hold beliefs such as, "I should keep fighting to accomplish a task that I believe is important," "I should keep fighting because I do not want to let my friends down," or "I should keep fighting or else I will be punished." Each soldiers' belief also has an element of strength—for example, cohesion might range in degree from the amicability between work friends to the feeling that fellow soldiers are like a family. Finally, every soldier probably has multiple sources of combat motivation (e.g., "I do not want to let my buddies down, and besides, I will be court-martialed if I do not fight.") Focusing on just the primary source, however, is a useful simplification that will be employed here.

Cohesion is one type of combat motivation, ideology or coercion, that is developed through training. Cohesion is here defined as, "the extent to which [individuals] come together to form the social group and hold together under stress to maintain the group."²¹ It is fostered through training and drills that emphasize mutual trust and teamwork²² and is sometimes equated with morale.²³ Cohesion, like all combat motivations, is an internal cognition rather than observable behavior.

Previous studies have moved straight from combat motivation to combat effectiveness while leaving tacit an intervening step that the author calls battlefield participation. The author defined battlefield participation previously as attempting to defeat the enemy when under fire, in contrast to nonparticipation by either fleeing or hiding. Besides its theoretical logic, battlefield participation focuses attention onto an observable phenomenon rather than internal cognitions.

Battlefield participation is a necessary but not sufficient condition for combat effectiveness—the pound-for-pound contribution of each soldier toward achieving victory under enemy fire. Japanese soldiers enthusiastically participated in banzai attacks in World War II, for example, despite their suicidal ineffectiveness. Battlefield participation interacts with other factors, such as strategy and technology, in determining combat effectiveness. Additionally, victory or defeat does not perfectly correlate with combat

effectiveness or ineffectiveness; an army might fight well at the small unit level but be overwhelmed by weight of numbers or poor generalship at the operational or strategic level. The following diagram presents a synthesis of these terms in a way that is consistent with their previous usage and that can provide a useful guide in a review of the literature.

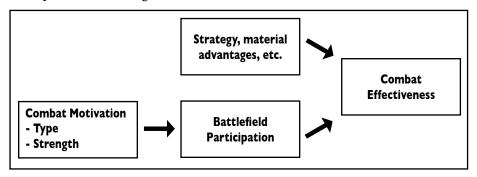


Figure 1. Existing theory in the literature. Source: Author

Past Research Focuses on Combat Motivation to Explain Battlefield Participation

Following World War II, combat motivation research argued that cohesion within a small group was the primary determinant of battlefield participation. This focus grew out of psychology's concept of the primary group, a small group defined by face-to-face interactions.²⁴ Shils and Janowitz contended that strong cohesion at the squad level motivated German soldiers to continue fighting when American units would have disintegrated.²⁵ Marshall sensationally estimated that only 25 percent of American GIs participated on the battlefield because of poor social cohesion.²⁶ According to Marshall, this was only true of riflemen, whose job was to engage the enemy with their personal weapon; for soldiers who operated crew-served weapons like machine guns or mortars, the small unit cohesion provided by their crew made them more likely to fight back. While his method was not systematic, and his results have proved controversial,²⁷ Marshall's basic point, that many soldiers do not participate in battle, has been supported by other scholars.²⁸ Finally, Stouffer et al. also supported the primacy of small group cohesion, finding that 61 percent of American soldiers said that thoughts of not letting their comrades down motivated them in combat, compared to 34 percent who cited idealistic reasons.29

This received wisdom—that small group cohesion is the sole determinant of battlefield participation—shaped American analyses of and responses to problems in the Vietnam War. Some argued that the higher cohesion of the North Vietnamese enabled them to sustain themselves in combat in a way that Americans could not.³⁰ To address this perceived problem, in 1981, the Army implemented the cohesion, operational readiness, and training system to keep soldiers together and build social cohesion, although it was abandoned due to feasibility issues.³¹ Debate continues on whether there exists a unique task cohesion³² and the extent to which masculinity and training build cohesion.³³ On theoretical levels, new varieties of cohesion—vertical, organizational, and institutional—were added to the traditional horizontal cohesion between peers.³⁴ Yet, even the most abstract definition of cohesion does not embrace larger political units, as ideology continues to be perceived as an ineffective type of combat motivation.

However, other studies have argued that combat motivations other than cohesion can lead to battlefield participation. Ersatz units in the German³⁵ and Israeli³⁶ militaries, whose members lacked previous acquaintance, have performed well in combat. In contrast to the traditional insistence that cohesion is the only combat motivation that leads to battlefield participation, Bartov and Posen postulated that ideology or nationalism, respectively, were effective combat motivations in certain historical armies.³⁷

Wong et al.'s 2003 study of combat motivation in Iraq further complicated the debate. The study found that American soldiers were motivated both by peer cohesion and ideologic reasons, while Iraqis were motivated by coercion (fear of punishment by their own state). This makes sense—the Americans were volunteers, while the Iraqis were conscripts under a dictator. It also supports the intuitive belief that soldiers fighting for each other are more effective than those who are forced to fight.³⁸

The equation of combat motivation with battlefield participation caricatures a complicated phenomenon, however. The Americans in Iraq had high cohesion in their all-volunteer force; they also had sophisticated combined arms training. The Spartans had deep bonds of community formed within their lifelong dining group, the syssitia; they also trained from birth to fight. The efficacy of training, manifested during combat with the enemy, feeds back into battlefield participation, bolstering the effective soldiers while disheartening the ineffective. In the next section, the author elaborates on this idea of how training influences the participation of soldiers on the battlefield.

Effective Training Also Increases Battlefield Participation

Scared soldiers do not fight. For a practical example of this, think of the case of German versus American battlefield participation in World War II. German squad tactics were oriented on achieving fire superiority through a machine gun, either the MG 34 or the later MG 42. In contrast, American squad tactics mistakenly favored accuracy over suppression, resulting in superior German combat effectiveness at the small unit level. Although the German table of organization varied, most German companies had around 12-16 machine guns.³⁹ In contrast, the American company had only two light machine guns (Browning .30 calibers) and one heavy machine gun (.50 caliber) per company. At the battalion level, the discrepancy only got worse—the American heavy weapons company itself had fewer machine guns than a German line company. 40 The German machine guns were also superior in quality, being lighter than the American light machine gun while having a higher rate of fire and being less prone to barrel malfunctions. The MG 42 was nicknamed by American soldiers Hitler's Buzzsaw for its high rate of fire; the War Department even made a film to try to counter the fear it inspired in American soldiers.⁴¹ It is no mistake that in the contemporary American infantry squad, there are three light machine guns, the same as in an entire American World War II company; this constitutes a tacit admission in the superiority of the German system.

The difference between German and American small unit tactics highlights the importance of using the modern system of force employment as an element in generating battlefield participation through increased confidence. Biddle describes the modern system at the tactical level as "a tightly interrelated complex of cover, concealment, dispersion, suppression, small unit independent maneuver, and combined arms." Using cover and concealment protects soldiers from enemy fire, dispersion and small unit independence allow large formations to leverage cover and concealment during the attack, and suppression further reduces attackers' exposure. The German emphasis on suppression with machine guns was one element that made their tactics more congruent with the modern system than the Americans in World War II.

Equipment by itself does not lead to the employment of the modern system—effective training is also needed. While military training has always been important, it only came into its modern form during the 30 Years War

from 1618 to 1648. Then, pioneers such as Gustavus Adolphus and Maurice of Orange, pioneered the professional army of full-time soldiers who spent their time outside of combat conducting drills to prepare them for combat.⁴³ Now, differences in training can lead to different levels of battlefield participation.

Now, differences in training can lead to different levels of battlefield participation.

Take the example of the Iraqi army who possessed advanced Soviet equipment during Desert Storm yet failed to employ and integrate them effectively. Their poor training

contributed to their low battlefield participation, which manifested itself in tens of thousands of Iraqis surrendering.

Intuitively, the U.S. believes that training in modern system tactics makes soldiers more likely to participate on the modern battlefield. However, as discussed previously, it is hard to translate this intuition of the art of war into a scientific fact. Adding scientific certainty would allow the U.S. to understand under what conditions training is effective and how big of a problem nonparticipation by its partners is in the first place. To understand the effect of the modern system training on battlefield participation, a case where some soldiers received modern system training and others did not is needed; such a case exists among the U.S.'s Kurdish partners in northern Iraq.

Peshmerga Training: The Good, the Bad, and the Ugly

The history of the Peshmerga can be divided into four phases, each with their own mix of training regimens. First, from the 1950s to the 1990s, the Peshmerga resisted successive Arab regimes in Baghdad that attempted to dominate and sometimes exterminate them. As guerillas, they had no formal training sites; many of the senior Peshmerga still in service from this era have no formal training, having only developed intuitions through on-the-job training and battle experience.

Second, after achieving de facto autonomy in 1991, the Peshmerga set up formal military training sites that continue to operate. While these training sites might have been better than no training, their doctrine was and still is guided by Kurdish veterans of the Iraqi army. The Iraqi army has never used the modern system effectively; for example, Biddle cites their failure to dig in and emplace sentries as instrumental in the Iraqi defeat at the Battle of 73 Easting during Desert Storm. The author heard one illustrative story

from a Kurd who was conscripted into the Iraqi army during the Iran-Iraq War before he joined the Peshmerga. In the Iran-Iraq War, he would fire his Sagger (*Malyutka*) guided missile from his armored vehicle and then flee to avoid counterfire. Given that the Sagger is optically guided and requires the gunner to steer the missile until impact, this was unlikely to be effective. An army trained in the modern system would either use suppressive fire to cover the gunner or use the terrain to conceal the gunner from counterfire. These Kurdish veterans of the Iraqi army's non-modern system established the Peshmerga's training sites, meaning that the Peshmerga have never been able to implement modern system training internally.

Third, from 2003–2011, the U.S. provided limited training to the Peshmerga, though that training was in counterinsurgency tactics rather than modern system tactics for conventional warfare. The Peshmerga were valuable allies for the U.S., having local knowledge that the U.S. could use to identify otherwise hidden insurgents. On the other hand, the U.S. saw that the Kurds, who aimed at an independent state, did not have identical interests to its own. U.S. officials worried that if the Peshmerga were too competent, they would be able to secede from Baghdad's hegemony. Additionally, the U.S. did not need the Peshmerga to have modern system training, which is geared toward fighting conventional opponents—they only needed the Peshmerga to be counterinsurgents. This interest divergence and the nature of the Iraqi insurgency, therefore, deprived the Peshmerga of modern system training.

Finally, the 2014 ISIS attack paradoxically increased the number of untrained Peshmerga while also introducing mass modern system training. In response to initial setbacks, a new wave of untrained Kurdish fighters joined as volunteers, often through their tribes; as the situation stabilized, many of these fighters demobilized, but others were formally inducted into the Peshmerga without attending a formal training course. On the other hand, a coalition of Western countries arrived and set up large bases to provide modern system military training. ISIS's possession of territory and use of conventional tactics meant that modern system tactics were effective; had ISIS been using insurgent tactics during this time period, the modern system would not have been effective. The Peshmerga were also amenable to changing tactics as they were facing a fundamental external threat.⁴⁴

Coalition training focused on small unit maneuvers in line with Biddle's description of the modern system. Peshmerga were trained on how to conduct fire and movement, both in vehicles (as described in the opening vignette) and on foot. They were taught how to use cover and concealment when moving into the attack to shelter from enemy firepower. Troop dispersion, to minimize the effects of enemy explosives, was another key theme of the training. One important element that was missing, however, was the use of combined arms tactics. The Kurds possess few indirect fire weapons of their own, being limited to a few mortars and artillery pieces. These they operate poorly. While the coalition provided fire support with aircraft, coalition training did not train Peshmerga how to locate, call for, or coordinate movements with the aircraft.

Coalition training was effective in instilling modern system tactics in the Peshmerga where internal Peshmerga training had been ineffective. Untrained Peshmerga, while extraordinarily brave, tend to bunch together (ignoring dispersion) and fail to use suppression when going on the offense. Under fire, many even forget basic weapons handling skills (as can be observed in videos that are available online).⁴⁵ One Peshmerga brigadier general lamented that this was not limited to the lower ranks; in combat, many of the brigade commanders, who were used to leading small guerilla units, would try to physically lead soldiers into combat instead of directing their units from a headquarters. Formal internal training was better but often focused on creating good visuals. Visiting one such training camp, the author observed that they were proud of displays such as having Peshmerga execute kung fu moves in unison or fire an AK-47 while repelling down a tower. 46 Such skills, while visually impressive, are impractical in combat and do not contribute to modern system fighting. To quote one of the trainers, "Before, the Peshmerga had no training and would show their entire bodies to the enemy."47 In contrast, coalition training emphasized practicalities of cover, concealment, and suppression; the opening vignette in this article was the clearest example of the coalition's training that the author observed. The author met two veterans of Western militaries who were volunteering with the Peshmerga that also expressed their belief that the intense coalition training had resulted in tactical shifts in the Peshmerga that made them behave more like modern system Western militaries.

Chapter 2. The Surveying Model for Evaluating Battlefield Participation

Internal Training Marginally Increases Confidence—Coalition Training Greatly Increases It

First, the author presents the results of a simple test of the significance of confidence level between the three levels of training: untrained, internal, and coalition. Means for each group are in red, and significance levels for paired comparisons are displayed on the top. The p-value shown for each paired comparison is a statistic that tells the surveyor how likely it is that the difference between the two means is due to chance; all of the paired comparisons produce a p-value less than .01, meaning that there is less than a 1 percent probability that differences in the Peshmerga's confidence was produced by random chance instead of by the training.

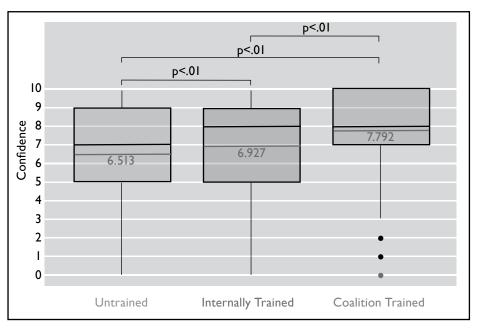


Figure 2. Both coalition and internal training increase the confidence of Peshmerga. Source: Author

While internal Peshmerga training slightly increases their confidence, coalition training substantially increases Peshmerga confidence. As can be seen, on average, untrained Peshmerga chose 6.5 as their confidence in their unit's preparedness for combat. Internally trained Peshmerga are slightly higher at 6.9, but coalition trained Peshmerga are much higher at 7.8. This indicates that coalition training is associated with increased confidence in the Peshmerga.

A simple comparison of means, however, is only valid if the training status is assigned randomly. There is a potential problem with omitted variable bias, which the author will illustrate with a short example. Looking at all the days in the year and comparing ice cream sales to swimming pool

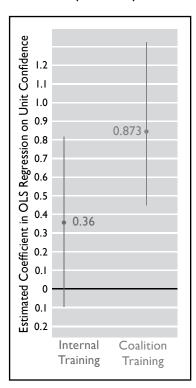


Figure 3. When controlling for other factors, coalition training is associated with increased confidence, but internal Peshmerga training is not. Source: Author

visits, a strong correlation would emerge. From this, one might conclude that eating ice cream leads people to go swimming. However, this ignores the omitted variable of temperature. Higher temperatures lead people both to eat more ice cream and go to the pool. In the case of the Peshmerga, older Peshmerga could both be more confident and more likely to have received coalition training; in this case, maybe age is causing the increased confidence, not the coalition training. To address this problem, the author uses a technique called an ordinary least squares (OLS) regression; in the author's OLS regression, he tests a variety of control variables that could plausibly be related to both training status and unit confidence (such as age, education level, unit membership, source of combat motivation, etc.). By controlling these other variables, OLS can show if they are increasing the Peshmerga's confidence or if the training regimen is.

Coalition training has a positive and significant relationship with confidence, while internal training has a positive but statistically insignificant relationship with confidence, even when controlling for control variables and combat motivations. This positive relationship indicates that coalition training is indeed increasing the confidence of Peshmerga.

The problem with OLS regression is deciding what control variables to include. In the kitchen sink regression with all conceivable variables, the relationship between internal training and confidence becomes insignificant; the relationship between coalition training and confidence remains significant. Theoretical justifications could be made about why fewer control variables should be included; however, the ambiguity about which control variables to include is a shortcoming in the OLS method.

To address this shortcoming with OLS regression, the author used least absolute shrinkage and selection operator (LASSO), which suggests that internal training is a significant predictor of confidence. In brief, the LASSO does not include all variables in the final regression but drops some control variables that are found to not be significantly impactful in accordance with a tuning parameter, lambda.⁴⁸ Using the LASSO, both coalition and internal training are included in the final regression as significant factors affecting confidence. The estimate of coalition training's effect is similarly positive and greater in magnitude than the comparison of means (coalition training increases confidence by 0.64 standard deviations). The impact of internal training is also greater than in the simple comparison of means, increasing confidence 0.22 standard deviations above their untrained compatriots.

The result of this quantitative work supports the theory that coalition training is better than internal, non-modern system training in improving confidence. The next question is whether this increased confidence led to different levels of battlefield participation among U.S. partners.

Only Coalition Training Increases Battlefield Participation

Coalition training increases self-reported battlefield participation, while nonmodern system internal training does not. Figure 5 shows the difference in mean responses to the survey list experiment between the treatment (sensitive) and control groups with 95 percent confidence intervals established by t-tests (a statistic used to determine if there is a significant difference between the means of two groups). Recall from previous discussion that the difference in means between the sensitive group and the control group indicates

the percent of respondents who are agreeing with the sensitive item—in this case, that they hid in combat and did not fire back. In the middle of the figure is the complete sample of riflemen in the Peshmerga (n=955); there is a statistically significant difference in means with a 95 percent confidence interval that does not cross zero. The substantive impact of this difference in means is easy to interpret—about 12 percent of Peshmerga agree with the

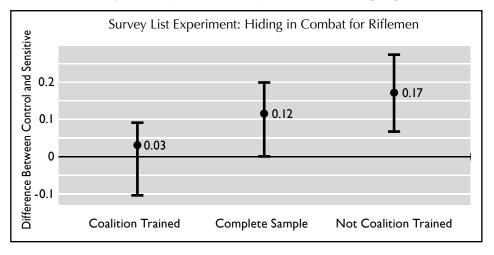


Figure 4. Survey list experiment results for riflemen showing that Peshmerga without modern-system training hide in combat, but coalition trained Peshmerga do not. Source: Author

statement that they hid in combat and did not return fire.

Losing over 10 percent of a combat force is devastating, meaning that the substantive impact of low battlefield participation is significant. Over the course of three years of conflict with ISIS, the Peshmerga lost 1,745 killed in action (KIA) and over 10,000 wounded in action (WIA).⁴⁹ With over 200,000 Peshmerga, this means that the Peshmerga suffered less than 1 percent of their force as KIA and 5 percent as WIA over three years.⁵⁰ While this is much higher than the U.S. casualty rate during Operation Iraqi Freedom,⁵¹ it is far smaller than the 12 percent effective loss that the Peshmerga suffer from hiding in combat. While this does not approach Marshall's infamous 75 percent figure, it does indicate that battlefield participation has significant tactical and operational effects.

Subsetting the results by coalition training shows a clear difference—coalition training is associated with improved battlefield participation. On

the left of figure 5, the survey list experiment does not produce a statistically significant difference between the control and treatment groups for coalition trained Peshmerga. The confidence interval crosses zero, and the substantive estimate is very small. This means that it is likely that few, if any of the coalition trained Peshmerga, were indicating that they were hiding in combat.

Peshmerga with modern system (coalition) training can be contrasted with those without such training on the right. Seventeen percent of Peshmerga who were not trained in the modern system by the coalition indicate agreement with the hiding prompt, and the confidence interval does not approach zero. This result indicates that a substantial proportion of Peshmerga who have not received coalition training hide in combat; additionally, they are probably driving the difference between treatment and control that is found in the test of the complete sample.

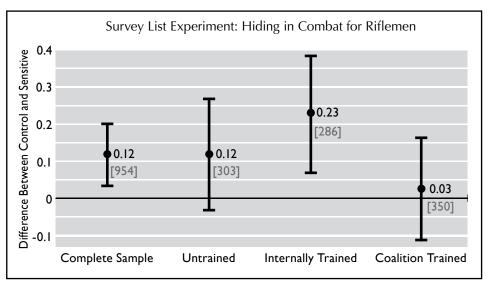


Figure 5. Internally trained Peshmerga significantly and substantively admit to not participating on the battlefield. The point estimate for untrained Peshmerga is equal to that of the overall sample although the confidence interval crosses zero. Point estimates are shown with degrees of freedom in brackets. Source: Author

Peshmerga with internal training only, not in the modern system, admit to not participating on the battlefield, unlike the coalition trained Peshmerga. Figure 5 shows the differences for the complete sample—untrained Peshmerga, internally trained Peshmerga, and finally, coalition trained

JSOU Report 21-8

Peshmerga. Internally trained Peshmerga admit substantively and significantly to hiding in combat; although the point estimate is higher than the estimate for the complete population, this is possibly due to a sampling error. The confidence interval is wide, although not crossing zero, and there is no theoretical reason that the author can think of that internal training causes Peshmerga to participate less on the battlefield. More problematically, while the point estimate for untrained Peshmerga is positive as expected, the confidence interval crosses zero. This means that we cannot with 95 percent confidence say that the true value is not zero; with a t-value of 1.55, there is 87.7 percent confidence that the true value of Peshmerga who are admitting to not shooting back in combat is greater than zero (p = .123). Figure 5, however, shows the most important finding: that modern system training is distinct from non-modern system training; the assertion that untrained Peshmerga suffer a similar problem with battlefield participation as their internally trained brethren must, however, rely on theoretical and qualitative reasoning rather than statistical proof. The next section bolsters confidence in that respect by addressing possible counterarguments and an alternative to the proposed theory about training.

Chapter 3. Counterarguments and Alternative Explanations Do Not Satisfactorily Explain Variation in Battlefield Participation

Counter One: Coalition Training Changed Combat Motivations

Is coalition training causing these effects by changing combat motivations? Much of the scholarly debate on combat psychology has centered on the importance of combat motivation. It might be that coalition training was not affecting the calculations of Peshmerga about success but rather increasing, say, their unit cohesion. If this were true, Peshmerga who had received coalition training would report that they had been motivated in combat by different factors than Peshmerga who had not been trained by the coalition.

To gauge the combat motivation of Peshmerga, survey participants who were combat veterans were asked, "Generally, in your combat experience, what was most important to you in making you want to keep going and do as well as you could?" This is the exact same wording that Stouffer et al. used in a survey of enlisted American infantry⁵² veterans from campaigns in North Africa and Sicily, allowing for some comparison of answers to other contexts.⁵³ In the case of American veterans, the most common responses in order of preference were:

- 1. Ending the task (End)
- 2. Solidarity with the group (Solidarity)
- 3. Thoughts of home and loved ones (Home)
- 4. Sense of duty and self-respect (Duty)
- 5. Self-preservation (Self)
- 6. A job to be done
- 7. Idealistic reasons (Ideology)
- 8. Vindictiveness

- 9. Lack of any alternative action
- 10. Leadership and discipline
- 11. Indifference

In this framework, response number two (Solidarity) would indicate a cohesion-oriented motivation, while response number seven would indicate ideology or nationalism along the lines of Bartov and Posen. Based on feedback from survey enumerators during the piloting of the survey, a few methodological adaptations were made to the answers to make it sensible to the Peshmerga. Clarifying quotes from Stouffer were included next to Stouffer's typology to help enumerators categorize the Peshmerga's answers. For example, respondents were read, "Sense of duty and self-respect: 'I am doing my part." The idealistic reasons clarifying quote was adapted for the Kurdish context to read, "I was fighting for Kurdistan." Another variation of cohesion was added that the enumerators felt would be more appropriate to the local context: "Social pressure: 'I would feel ashamed to quit," although this did not wind up being chosen often. Finally, the enumerator could code multiple responses if this seemed appropriate; this change was made after it was found, during survey piloting, that Peshmerga would often give multiple responses.

Figure 6 shows that self-reported combat motivations are similar between Peshmerga of different training levels, meaning that the increase in battle-field participation associated with coalition training is not due to changes in combat motivation. All groups are dominated by ideology, which in this context was explained to Peshmerga as "I was fighting for Kurdistan." The next five most common responses were the same between the trained and untrained groups. ⁵⁴ While coalition training did affect battlefield participation, it did not affect the self-reported combat motivation.

Additionally, there was not a significant change in the level of Peshmerga who reported being motivated by "leadership and discipline: 'It was my training,'" between the trained and untrained Peshmerga. This was found to be insignificant among both training conditions, as it was in Stouffer's original survey. This also supports the idea that combat motivation is separate from training-based confidence as a driver of battlefield participation.

As a final point, the dominance of ideology (in this case, nationalism) in driving combat motivation is interesting given how rare ideological

motivations were for American soldiers in Stouffer's survey where only 5 percent of respondents cited ideology as their primary combat motivation. This result is supported in qualitative interviews of Peshmerga by other scholars.⁵⁵ This is a warning that theories developed in Western militaries might not travel well to other contexts.

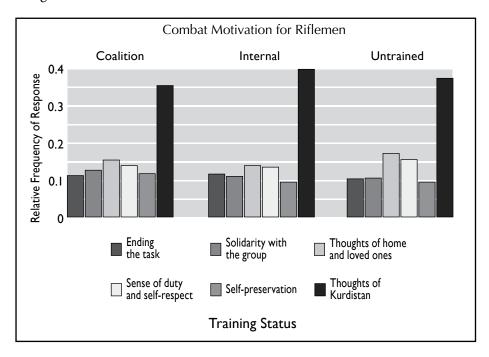


Figure 6. Combat motivation among Peshmerga is the same regardless of training. Source: Author

Counter Two: Coalition Training Increased Hatred toward the **Enemy**

Another possibility is that coalition training increased malice toward the enemy as an additional combat motivation and that this leads to increased battlefield participation. Training could be pumping up Peshmerga to kill the enemy by stoking ethnic tensions or some other device rather than making them believe that their unit is more effective. To measure this belief, the author used a question adapted from Stouffer et al. Peshmerga were asked, "How would you feel about killing a Daesh (ISIS) fighter in combat?"

Peshmerga responses were coded by enumerators in five categories exactly as in Stouffer:

- I would really like to kill an [enemy] fighter.
- I would feel that it was part of the job, without either liking or disliking it.
- I would feel that it was part of the job but would still feel bad about killing a man even if he were an [enemy] fighter.
- I would feel I should not kill anyone, even an [enemy] fighter.
- No response

We substituted Daesh, a popular nickname for ISIS, in place of enemy when asking Peshmerga; Stouffer asked American soldiers about both Japanese and German soldiers. The results from American soldiers showed a significant difference between attitudes toward killing Germans versus Japanese, with American soldiers being much more likely to say that they would like to kill a Japanese fighter. This result could be driven by the racial overtones of the conflict in the Pacific, ⁵⁶ by the desire for revenge after Pearl Harbor, or by the perceived immorality of Japanese tactics (e.g., faking death, night infiltration, etc.). In figure 7, the attitudes toward killing for Peshmerga are compared to those of American soldiers toward German and Japanese fighters.

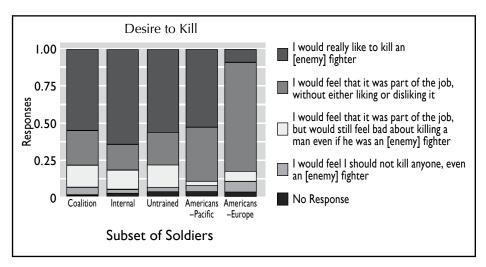


Figure 7. Desire to kill enemy fighters among Peshmerga is similar across training levels. Source: Author

Figure 7 shows that Peshmerga attitudes toward killing are similar across training levels, especially when compared to the discrepancy in American attitudes between the European and Pacific theaters. On the whole, Peshmerga attitudes are more like American attitudes toward Japanese soldiers than toward Germans. While coalition trained and untrained Peshmerga are similar, internally trained Peshmerga are slightly more enthusiastic about killing, although this is nowhere near as pronounced a difference as that between the two American theaters. The observed difference in battlefield participation, therefore, does not draw from an increase in malice, which would have undermined the argument about the importance of training.

Counter Three: Coalition Equipment or Fire Support Drives the Results

If coalition training is simply proxying for better equipment, and this better equipment leads to increased battlefield participation, then this would undermine the theory that training is driving increased battlefield participation. From personal observation, this did not appear to be the case. Almost all the Peshmerga in the Zeravani unit had German-provided G3 assault rifles regardless of whether they had received coalition training or not, whereas members of the political units (Unit 70 and Unit 80) almost all had AK-47s, even when they had received coalition training. Peshmerga were also asked in the survey if they provided their own rifle, and there is no difference between coalition trained Peshmerga and untrained Peshmerga (63.4 percent of noncoalition trained Peshmerga provided their own rifle versus 63.8 percent of coalition trained Peshmerga). In fact, when self-ownership of assault rifles is separated out between internally trained and untrained Peshmerga, internally trained Peshmerga are more likely to have been issued a weapon than coalition trained Peshmerga. Use of a personal firearm, moreover, was not a significant predictor of confidence in unit battle readiness. For these reasons, it seems unlikely that the effect of coalition training on confidence and participation is being driven by differences in equipment.

Payment of Peshmerga salaries by the coalition does not explain the differences in battlefield participation. During the war against ISIS, the Kurdistan Regional Government's (KRG) finances were precarious, and most Peshmerga went without a salary for some time. The U.S. provided hundreds of millions of dollars to mitigate this problem.⁵⁷ However, these salaries were

not paid based on coalition training status nor were coalition trained Peshmerga inadvertently paid more. The author asked Peshmerga, "What was the longest you went without pay in your unit?" Peshmerga went for 96 days, on average, without being paid. Peshmerga in the integrated units went 10 days less without pay than those Peshmerga in partisan units. However, within the partisan units, there was no statistically significant difference in the length of time without pay between Peshmerga with coalition training and those without training. The salary program was not designed to favor Peshmerga with coalition training, and it did not; variations in the consistency of pay cannot explain the results presented here.

The issue of fire support is more difficult to address, but again from a qualitative side, the author observed coalition aircraft operating in support of a political unit in which few members had received coalition training. Commanders of units that had not received coalition training still had the phone number of Western liaisons and could call for airstrikes. Coalition special forces who could call in airstrikes reacted to ISIS attacks regardless of the training status of the Peshmerga who were on the defense. One of the rare coalition fatalities during the campaign occurred when a quick reaction force went to the aid of a noncoalition trained unit that was under attack in Tel Askuf.⁵⁸ Coalition airstrikes were not biased toward coalition trained units. Additionally, as noted previously, coalition training did not teach the Peshmerga combined-arms maneuver in conjunction with air support. Even Peshmerga trained by the coalition did not have the equipment or training necessary to communicate with coalition aircrafts directly; this supports the conclusion that the results are not driven by coalition fire support.

Alternative Argument: Combat Motivation Determines Battlefield Participation

The traditional argument–combat motivation determines battlefield participation–is not supported by the evidence. Authors from Shils and Janowitz to Henderson have argued that social cohesion between soldiers at the lowest level leads to high battlefield participation; attempts to motivate soldiers through other motivations such as ideology are, in this view, doomed to produce soldiers who do not participate in battle. Bartov and Posen turned this on its head, arguing that in some armies, subscription to a mass ideology by the rank and file leads to high battlefield participation. Either way,

these arguments do not include the confidence-building effects of training as a driver of battlefield participation.⁵⁹

Neither cohesion nor ideology, however, were significantly associated with a difference in battlefield participation. Figure 8 shows the difference in mean responses between control and sensitive groups for the complete sample—Peshmerga motivated by group solidarity and Peshmerga motivated by nationalism (ideology). The results are statistically and substantively similar, indicating that these combat motivations do not affect battlefield participation.

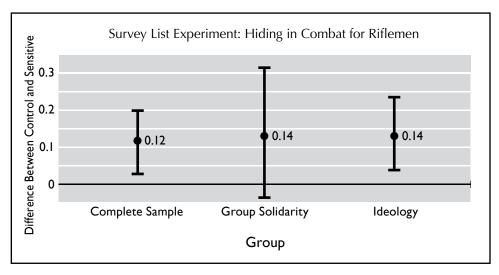


Figure 8. Combat motivations do not cause differences in hiding in combat. Source: Author

Conclusion

Using a survey of 2,301 Peshmerga during the war with ISIS, the author showed that training by the Western coalition was associated with increased confidence in combat readiness and increased battlefield participation. Among Peshmerga who were not trained by the coalition, 17 percent indicated that they hid in combat; almost none of the coalition trained Peshmerga hid. This suggests that hiding is a serious problem among U.S. partners but that U.S. training can help.

More broadly, these findings suggest that efforts to bolster partner militaries should focus on small unit tactics rather than reforming command and

control structures. In 2017, the U.S. had military forces in over 150 countries, including about 40,000 service members in the Middle East, many of them training allied militaries. However, many doubt its effectiveness. Despite having allocated more than \$274 billion to "build the capacity" of partners since 2000, the Afghan government has suffered significant losses against the Taliban and the Iraqi army fled when attacked by ISIS in 2014;60 Biddle et al. argued that security assistance could only be effective if it is "intrusive and conditional, which it rarely is."61 The results here, however, suggest that training could be effective if more emphasis were placed on training small unit tactics. For example, instead of spending \$814 million on helicopters for the Afghan military,62 the U.S. would probably be better off extending the training period for Afghan infantry recruits to ensure that they master the modern system.

Second, these results might explain why some militaries are resilient (e.g., the German Wehrmacht) and why others prove brittle and rout (e.g., the Iraqi military). Large differences in combat effectiveness at the small unit level might lead to lower participation, in turn further reducing combat effectiveness and so on in a spiral that leads to mass desertion. On the other hand, militaries that are effective at the small unit level continue to fight, although their strategic situation is hopeless. Thus, soldiers in the Wehrmacht understood that the strategic situation was futile yet continued to participate on the battlefield.⁶³ The theory proposed here offers a rigorous explanation of military outcomes.

One unanswered question is if high combat motivation is a prerequisite of improved battlefield participation through training. Most Kurds indicated that nationalism was an important source of combat motivation; the author observed that this led to high enthusiasm within the Peshmerga, in line with the arguments of Posen. While their political system was dominated by patron-client relations, Kurds supported their patrons in free and fair elections; patriotic unit songs included stanzas about the virtues of the president and parliament. In other cases, without a baseline of combat motivation, foreign military training might be ineffective. No matter how competent one's group is, there will be no action in the absence of motivation. The state of political illegitimacy in Iraq in 2014 might have sunk combat motivation in the Iraqi army so low that no amount of training could lead to adequate battlefield participation; thus, they proved brittle and routed when attacked by ISIS. The extent to which Kurdish nationalism restricts the scope of this

theory has critical implications for policymakers and military scholars. Unfortunately, this question could only be answered by conducting surveys in other contexts and comparing results.

What are more subtle differences in training that states can use to increase battlefield participation? In the case of Peshmerga, there was a clear opportunity for improvement in training from none to basic modern system training. For partners who have already implemented basic modern system training, what benefits can U.S. training offer? While this question is beyond the scope of this study, the necessity of understanding battlefield behavior, unfortunately, remains an imperative in the twenty-first century and will likely continue to be so.

Improving the performance of U.S. partners in combat is not the only objective of SFA; often, the goal is to professionalize U.S. partners in order to increase the stability of their country's civil-military relations. In the next section, the author investigates the effectiveness of U.S. efforts to professionalize the Peshmerga.

Chapter 4. Can the U.S. Professionalize Partner Forces?

pon entering a brigade headquarters of Kurdish fighters during their war against ISIS, is it apparent if it is a partisan brigade controlled by a political party or an integrated brigade created by the American SSR effort? Consisting of soldiers from both political parties, the integrated brigades are supposed to operate differently from the partisan units who answer to their respective political parties. On the ground, however, things look similar. Both integrated and partisan units feature portraits of martyrs who have fallen during their fight against ISIS. The brigade's guided missile launcher, gifted by Germany to defeat ISIS suicide vehicles, occupies a place of honor in both; in one integrated unit, the launcher was situated on a pedestal like a holy relic. However, the integrated units have a notable absence—there are no portraits of political leaders. In partisan units, the leaders of the political party—Masoud Barzani for the Kurdistan Democratic Party (KDP) and Jalal Talabani for the Patriotic Union of Kurdistan (PUK)—constantly encourage Peshmerga with their paternal gaze. Does this difference correlate with more meaningful indicators of professionalism, or is it purely cosmetic with partisan dynamics still dominating the units?

More generally, how successful is SSR at instilling military professionalism? Military professionalism, defined here as the use of apolitical bureaucratic institutions to maximize military effectiveness, is often lacking in U.S. partner militaries. SSR has become the dominant framework for the

improvement of military professionalism by the first world interveners. The SSR paradigm has been endorsed as a guiding framework for SFA by the United Nations (UN), African Union, Organization for Economic Co-operation and Development, and by countries such as the United States. Traditional SFA

Military professionalism, defined here as the use of apolitical bureaucratic institutions to maximize military effectiveness, is often lacking in U.S. partner militaries.

focused on improving the partner military's capacity; proponents of SSR argue that without concomitant professionalization efforts, these traditional

interventions destabilize civil-military relations and worsen the security situation in the targeted country.

SSR offers the U.S. the ability to achieve great strategic gains at relatively low cost. In a previous JSOU monograph, Shultz pointed out that ungoverned spaces around the world provide space for violent extremist organizations to set up bases of operations against American interests and that SSR provides a way to enhance U.S. partners' abilities to govern these spaces and thus reduce the threat to the United States.⁶⁴ Occupying Somalia, for example, and building a stable government there would require hundreds of thousands of soldiers, billions of dollars, and decades of effort. If the same objective could be achieved with a limited effort to professionalize the Somali military, then this would be a preferable course of action.

Despite the potential gains to be made with SSR efforts, there have not been many studies of its effectiveness. In another JSOU monograph, Paterson argued that U.S. training had been effective with Latin American militaries, saying that, "training can help professionalize a foreign military force by instilling U.S. values of subordination to civilian authority, respect for human rights, and adherence to rules of warfare entailed in international humanitarian law."65 However, it is unclear if U.S.-led SSR efforts in Latin America were equally effective in all countries or if some were more effective than others. Other evaluations that have found positive effects have focused on process⁶⁶ or the macro-level perspective of high-level officials.⁶⁷ Just because a process has been followed, however, does not mean that the desired outcome has been achieved. Representatives of the targeted force have an incentive to claim that SSR has led to far-reaching changes in order to appease the international community; those who implement SSR programs have a bureaucratic incentive to claim success to ensure continued funding, regardless of the actual effects. Outside evaluation of SSR is therefore needed to ascertain its effectiveness.

In the same survey described in section two, the author asked questions to evaluate the success of professionalization efforts. As noted previously, the U.S. has been attempting to professionalize the Peshmerga for several years by creating integrated brigades, whose members would hail from the two principal Kurdish political parties. The author asked Peshmerga from both these integrated brigades and their partisan counterparts questions such as, "Is the support of a political party important for promotion?" and, "Is your platoon commander in your tribe?" These units are supposed to be

apolitical and professionalized; is this reflected in their military organizational practices?

The integrated brigades are not substantively more professional than their partisan counterparts. In a naïve comparison of average responses, there was no difference between integrated and partisan Peshmerga for some of the questions; when there was a statistically significant difference, it often was not substantively large. Next, the author measured professionalism as a latent variable using item response theory, a statistical method common in psychology. There was no difference between integrated and partisan Peshmerga. Finally, the author used a machine learning algorithm called extreme gradient boosting to see if integrated status could be predicted from responses about professionalism—it could not.

These results suggest that SSR efforts might face an uphill battle; at the very least, more research on their effectiveness is needed. The Peshmerga of Kurdistan represent an easy case because the engagement was well funded, the training was provided by a first-rate military (Americans), and the engagement went on for several years. If SSR cannot professionalize soldiers in this case, it is less likely to succeed in situations with a less deep engagement.

This chapter also demonstrates one method for supplementing the qualitative observations of military professionalism with quantitative data. Previous studies of professionalism have relied on interviews; while informative, it might be hard to detect subtle differences between forces. Moreover, surveys of normal soldiers can help ensure that scholars are not misled by the statements of elites, who have incentives to misrepresent the status of their military. Using similar surveys in other contexts could improve the knowledge of coup-proofing measures and other elements of civil-military relations.

First, the author reviews the literature on military professionalism. Second, the author describes the case of Iraqi Kurdistan. Third, the author explains how the survey was conducted. Fourth, the author presents the results of several quantitative analyses. Finally, the author concludes with policy recommendations and suggestions for future research.

What Is Professionalism? Why Is It Important?

American servicemembers of all ranks invoke professionalism in a variety of contexts and often with a variety of different meanings. A unified definition

is needed to ensure a coherent discussion. What does military professionalism mean in the context of academic debates over civil-military relations?

Huntington offered the classic institutional definition of military professionalism that emphasizes apolitical practices.⁶⁸ When a military is professionalized, civilian control over the military is called objective; subjective control refers to a situation where a nonprofessional military is controlled by virtue of its resembling the body politic (i.e., in an aristocratic society the military is commanded by unprofessional aristocrats). He defines a profession as a trade entailing expertise, responsibility to society, and corporate identity. The central expertise of the military is the management of violence—decisions are made according to rational-bureaucratic mechanisms in order to maximize the effectiveness of violence. Their responsibility to society means that they work for all of society and not merely a portion thereof. If the military obeyed authorities other than the de jure civilian authorities, they would not be acting responsibly. Finally, the military's corporate nature stems from strict laws that detail the requirements for entry and promotion—the possession of rank "reflect ... professional achievement measured in terms of experience, seniority, education, and ability,"69 not because of influence outside of the corporate body. The degree of professionalism can therefore be measured by the development of institutions such as, "(1) the requirements of entry" and "(2) the means of advancement." This institutional approach that focuses on bureaucratic mechanisms, however, was denied by others who believed that a clear civil and military separation is impossible.

Military fusionists argue that professionalism should be defined in terms of skills rather than bureaucratic institutions. Janowitz argued that modern warfare required recruitment for a wider social base with more civilian skills; these factors and others drove military officers to less likely be "heroic leaders" and more likely be managers and technicians. Since then, it has been argued that further trends in warfare have made the military profession less distinct than civilians, most recently due to the exigencies of counterinsurgency. However, it has been pointed out that fusionism must be continuously reintroduced because military officers remain distinct from their civilian counterparts in the context of the United States.

The author sided with Huntington and defines military professionalism as the use of apolitical bureaucratic institutions to maximize effectiveness against external enemies. A professional military, under this definition, should have promotions based on competence rather than loyalty, military units integrated across salient political divisions, ⁷³ and with training focused on military techniques via political indoctrination. The definition of bureaucracy in this monograph is in line with German sociologist Max Weber, focusing particularly on his requirement that a bureaucracy follows, "the principles of office hierarchy and of channels of appeal stipulate a clearly established system of super- and subordination." ⁷⁴ The existence of parallel chains of command is a violation of the bureaucratic principle. The author also specifies apolitical because political parties might have a bureaucracy that works toward a political end; it is therefore necessary to specify apolitical. The goal of the military should not be to maintain a certain regime in power but to fight against foes outside of the body politic. While Western militaries are often professionalized, this condition rarely holds in the developing world.

Civil-military relations in the third world are often characterized by unprofessional militaries that are heavily politicized. Finer lays out the diverse ways in which militaries can intervene in politics. In the West, militaries are typically limited to attempting to influence politicians to adopt policies that are favorable to the military, such as expanding their budget. In the developing world, however, military intervention in politics often escalates to the use of direct violence against civil authorities via *coup d'états*. In shifting his gaze from the American context, Huntington also recognizes this melding of the military and the political, which he dubs "praetorianism."

The lack of military professionalism causes third-world leaders to take elaborate measures to mitigate their fear of *coup d'états* and civil wars. These steps can include the promotion of family members, coethnics, or coreligionists to critical positions regardless of their competence and the creation of parallel armed forces.⁷⁷ As one Iraqi general noted of the Saddam Hussein era, "Whereas the saying in the early part of the Ba'ath rule had been 'better a good soldier than a good Ba'athist,' it changed to 'better a good Ba'athist than a good soldier."⁷⁸ These coup-proofing methods can be seen as attempts to foster subjective control over the military when the absence of professionalism precludes objective control.

The presence of coup-proofing measures in a military is evidence that they are not focused on external threats and thus do not meet the definition of professionalism presented here. Previous scholarship has investigated the deleterious effects of coup-proofing on defense from external forces. The traditional view is that these coup-proofing measures make it impossible for authoritarian regimes to utilize effective tactics. It is hard to have an effective organization if leaders are promoted for loyalty rather than competence, if small unit initiatives are punished rather than rewarded, or if units cannot train for fear that a coup will be carried out under the guise of a military exercise. ⁷⁹ On the other hand, recent scholarship has pointed out that authoritarian regimes can escape the coup-proofing trap and build effective militaries if they are not threatened by internal opponents. ⁸⁰ Outside of effectiveness, however, coup-proofing and the more general use of the military as a political base has a deleterious effect on pluralistic politics.

Unprofessional militaries empower authoritarian leaders to resist democratization and suppress human rights. Even if an unprofessional military accepts subordination to civilian leaders, the military's orientation on internal regime defense versus external foes means that they can support

Even if an unprofessional military accepts subordination to civilian leaders, the military's orientation on internal regime defense versus external foes means that they can support autocratic regimes that perpetuate inequalities.

autocratic regimes that perpetuate inequalities. For example, African presidents with ethnically stacked armies are more likely to defy the constitution (e.g., by extending term limits) than those without ethnically stacked armies.⁸¹ These exclusionary policies might paradoxically increase the risk of civil

war but still be pursued because they safeguard against other threats, such as $coup\ d$ 'états.⁸²

Traditional SFA can exacerbate civil-military tensions by empowering unprofessional militaries. Critics have alleged that American military assistance strengthens militaries who are not accountable to civilian leaders, worsening the prospects for democratic control of the military in the target country.⁸³ In the Cold War, the necessity of contesting communist influence led to the U.S. supporting a number of anti-communist authoritarian regimes.⁸⁴ The military assistance bolstered the military at the expense of civilian control, destabilizing civil-military relations. Indeed, researchers have found that both arms transfers⁸⁵ and the training of military personnel⁸⁶ are associated with increased risks of *coup d'états*. As pressure to curb these negative side effects increased, exemplified by the Leahy Law's prohibition on providing military aid to countries committing human rights violations,⁸⁷

SFA by Western countries has reshaped itself to include strengthening civil-military relations as a key objective.

A normative bias in favor of democratization and against military participation in politics has led Western countries to embrace the doctrine of SSR. SSR is an effort to broaden military training to include reformation of civil-military relations in the targeted country. One nongovernmental organization affiliated with the UN defines SSR as "the political and technical process of improving state and human security ... within a framework of democratic civilian control, the rule of law and respect for human rights."88 The UN had its first thematic resolution on SSR in 2014;89 as of 2018, eight UN peacekeeping missions have an SSR mandate. 90 The Geneva Centre for the Democratic Control of Armed Forces, in partnership with the UN, had SSR programs in 70 countries in 2017.91 The list of SSR programs run by the United States Agency for International Development goes to 40 pages.⁹² The SSR framework has been embraced by regional actors such as the African Union.93 American SOF look at SSR as a way to increase security in fragile states. 94 The SSR paradigm has come to dominate the broader framework of SFA.

SSR efforts generally aim to professionalize the military as a sine qua non for achieving other normative objectives. These efforts frequently seek to institutionalize bureaucratic practices in order to circumvent existing systems of parallel control that are in place to politicize the military. The U.S. Government's policy on SSR notes that, "In addition to building professional security forces, SSR programs support ... improvement of civilian management, leadership, oversight, planning, and budgeting capacities" among other lines of effort. While additional objectives such as gender equality, transparency, or respect for human rights are frequently part of SSR efforts, they are built on a base of professionalism.

There is limited evidence on the effectiveness of SSR, despite its dominance in peacekeeping and SFA literature. There is some empirical evidence that interethnic integration of militaries can facilitate post-conflict reconciliation. Theoretically, SSR is appealing because it asserts that external intervention can achieve military objectives without sacrificing political norms. Proponents of SSR argue that the promotion of these norms ineluctably reduces the sources of political contestation. This linkage between Western values and stability, however, might not hold. If local populations hold antithetical norms, then the promotion of Western norms could lead

to backlash; Afghans who view women as subservient to men, for example, might be motivated to resist Western efforts to promote gender equality. Whether SSR has the political effects that its practitioners desire hinges on the more basic question of whether a third-party intervention can professionalize partner militaries.

It is an open question if the norms training in SSR interventions is successful in transferring Western norms to partner forces. One study shows that, in the case of Liberia, training by the U.S. military led to increased respect for human rights and democratic norms; however, military parochialism eclipsed both imparted norms.⁹⁷ These norms, however, go beyond the foundational objective of fostering professionalism. The analysis is therefore lacking about the effectiveness of the basic goal of the most prevalent SFA paradigm. There have been consistent efforts to professionalize the Kurdish military over the last decades, making it a good context to investigate this basic question of SSR effectiveness. The author describes this context in the next section.

The Political Armies of Kurdistan

The Kurds of Iraq are politically divided. Since 1975, the Iraqi Kurds have been principally split into two parties, the KDP and the PUK. The KDP has been led by the Barzani family almost since its foundation in 1946. The PUK splintered off from the KDP in 1975; although it is less tribal in rhetoric, it is still dominated by the Talabani family. These two parties continue to be the most popular in Iraqi Kurdistan, with the KDP garnering 44.1 percent of the vote and the PUK 20.5 percent in the 2018 KRG elections. However, it would be a mistake to view these divisions as analogous to the division between political parties in Western democracies.

The division between the PUK and KDP entails separate governance structures, distinct militaries, and a rivalry that once led to civil war. The PUK's base of support is in the eastern and southern parts of Iraq, while the KDP is in the northern and western parts. Despite being notionally united by the foundation of the KRG in 1992, both parties govern their territory through parallel clientelistic systems. Disputes over the division of territory led to a civil war between the two parties in 1994, which resulted in thousands of casualties on both sides. Both parties called on external support during the fighting—the PUK from Iran and the KDP from Saddam

Hussein's government. American mediation ended the war in 1998. While the parties have not engaged in active hostilities since then, they have continued to operate separate administrations and armed forces in their respective territories since the liberation of Iraq by American forces in 2003. Although the KRG is nominally in charge of northern Iraq, the KDP and PUK *de facto* run parallel governments.

Both Iraqi Kurdish parties maintain substantial military forces that are responsible to them, rather than to the unified KRG. The PUK has a military (Unit 70) numbering around 60,000 men in addition to a 10,000-man paramilitary force (Bargry Firakawtin unit). The KDP's forces are slightly more numerous, with a 60,000-man (Unit 80) and a 45,000-man paramilitary, Zeravani force. While there is a Ministry of Peshmerga Affairs in the KRG, neither of these military forces receive their salaries from the ministry. In 2013, the Minister of Peshmerga Affairs for the KRG was appointed from an opposition party called Gorran; when relations between the KDP and Gorran broke down in 2016, the minister was ejected without any interruption to the ongoing war against ISIS. The partisan separation within the Peshmerga is the principal reason why they cannot be said to be professionalized, but it is not the only reason.

The allegiance to political parties contributes to several other unprofessional features of the Peshmerga. First, several units are tribally based, adding an additional layer between the soldiers and the de jure civilian government. Second, the Peshmerga operates on a rotation schedule where soldiers also hold civilian jobs. The Peshmerga typically operate on a twoweeks-on, two-weeks-off schedule where half of all Peshmerga will be on duty at any one time. This allows the Peshmerga to effectively double their strength during times of crisis, such as the initial invasion by ISIS, by recalling everyone to duty at once.99 It is also an important source of jobs in the clientelistic society. However, it hinders military effectiveness by diluting the amount of time available for training and preventing individual Peshmerga from focusing on their expertise in the conduct of violence. Third, the partisan nature of the Peshmerga means that loyalty to the party is a criterion in promotion, rather than being solely merit based. Finally, the partisan nature of the force allows for relationships to exist between Peshmerga of different grades outside of the formal chain of command. These parallel lines of communication can run through tribal lines, family ties, or shared patrons.¹⁰⁰ A random captain at Mosul Dam, to take an example from the author's personal experience, might personally know the head of the 45,000-man Zeravani force because their fathers had known each other. Just like other Middle Eastern countries, these parallel lines are sometimes formalized as informant networks through which the parties gather information. These points do not detract from the bravery of the Peshmerga or their prowess in halting and then rolling back ISIS; however, they are institutions that are not found in professional militaries.

The U.S. has tried to professionalize the Peshmerga through the establishment of integrated brigades, consisting of members of both the PUK and KDP. The idea of depoliticizing the Peshmerga and adopting a unified command structure has long had appeal for the strongly nationalist Kurds. Laws

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mandating the unification were passed by the KRG's parliament in 2007 but were not executed due to political differences. ¹⁰¹ To begin the SSR process, the U.S. decided to offer training and equipment to a limited number of test brigades in 2010. ¹⁰² Sometimes called regional guard brigades,

these fourteen brigades continue to receive logistical support and professionalization training from American advisors. 103

The effect of this SSR effort on professionalism is ambiguous, however. Just because these notionally integrated brigades exist does not necessitate that they function differently than their partisan counterparts. It could be, hypothetically, that the odd-numbered brigades report to the PUK while the even numbers report to the KDP. In fact, half of the brigade commanders come from the KDP and the other half from the PUK; they are balanced by their deputies, who come from the opposite party. A Western advisor told the author that for every equipment shipment to the integrated brigades, a KDP and PUK representative have to be present to count and divide the equipment. Partisanship might only affect the higher levels, however, meaning that the SSR effort has succeeded in fostering professionalism at the lower ranks. To evaluate the success of SSR in fostering professionalism, there needs to be quantifiable information gathered in a rigorous way. The next section describes how the author tried to do that with a survey of Peshmerga.

The Relevant Data Gathered During the War Against ISIS

The author surveyed 2,301 Peshmerga during the war against ISIS in 2017 in part to judge the effects of the U.S. SSR efforts. The survey is described in the previous section on battlefield participation.

A simple comparison of voting patterns shows that individual Peshmerga reflect their units' partisan affiliations. It is important not to assume that because a Peshmerga unit is controlled by a certain political party that all its individual members support that same party. Although Unit 80, for example, is controlled by the KDP, its individual Peshmerga might vote for non-KDP parties. However, this is not the case. Table 2 shows the distribution of votes for each party in the 2013 parliamentary election. KDP affiliated forces have almost no PUK voters and vice versa. ¹⁰⁵ Is the situation different in the integrated brigades?

Table 2. Peshmerga units voted in the 2013 election in accordance with their political affiliations. Source: Author

Political Affiliation	Unit	KDP Vote Share	PUK Vote Share	Other Votes
PUK	Bargry Firakawtin	0	75.6	24.4
	Unit 70	0.9	67.5	31.6
KDP	Unit 80	78.5	0.2	21.3
	Zeravani	83.2	0	16.8
Unaffiliated	Integrated	32.2	32.7	35

Table 2 shows that the integrated Peshmerga are integrated down to at least the brigade level. The survey enumerators surveyed integrated Peshmerga at five brigade headquarters. By comparing the vote shares between the KDP and PUK at each of these survey clusters (sites), the results depict that all clusters had similar proportions of PUK and KDP voters—cluster 32 had only 35 Peshmerga, perhaps explaining why there are disproportionately more "Other" votes in that cluster. 106

Measuring the degree of professionalism, the dependent variable for this study was more complicated than measuring the independent variable of unit affiliation, which was measured with one direct question: What unit are you in?

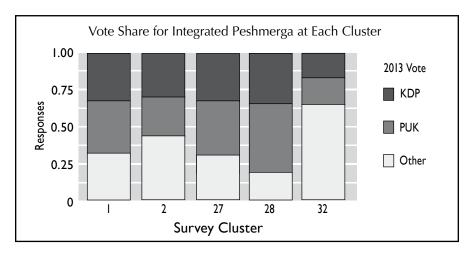


Figure 9. Integrated brigades contain both KDP- and PUK-voting Peshmerga. Source: Author

The author refrained from putting certain questions on the survey because they were sensitive and likely to jeopardize access. A direct question would be: If there was a conflict within the KRG, would you obey orders from your political party or from the central government? However, the Peshmerga leadership would not have approved a survey with this sensitive question on it.¹⁰⁷

Direct questioning about the civil-military values of the Peshmerga would have suffered from social desirability bias. Social desirability bias refers to when individuals responding to a survey prefer one thing but know that other actors want them to say another thing and thus falsify their answers to accord with the preferences of the other actors. Two factors created a social desirability bias toward reporting greater professionalism in the Peshmerga. First, the Peshmerga knew that they were receiving large amounts of aid from Western countries who were attempting to set up politically integrated units. Second, their nationalist ideology valued pan-Kurdish unity that runs counter to the reality of partisan separation. A direct question such as: Are you bound to follow the laws of the KRG instead of your own party? would be likely to generate a misleading picture of the degree of professionalism.

The author, therefore, focused on questions that would assess military organizational practices consistent with professionalism rather than asking about attitudes. Several scholars have attempted to measure professionalism

through interviews and qualitative methods.¹⁰⁸ Recent work by Reiter and Wagstaff attempted to move toward a quantitative paradigm by grading leadership performance and tenure during World War II to argue convincingly that the Germans did not practice loyalty-based promotions during that war, nor were social networks important for the American military.¹⁰⁹ However, the author was unaware of any previous survey that had measured the professionalism of a non-Western force quantitatively at the micro level. Talmadge's theory of military organizational practices provided the basis for devising many of the questions. Talmadge details the practices of Saddam Hussein's regime in relation to promotion patterns, training regimens, command arrangements, and information management.¹¹⁰ There were different civil-military challenges in Kurdistan in 2017 than existed in Saddam Hussein's Iraq in 1986, however, which required a variety of different questions to capture relevant variation.

Additionally, while Huntington focused on the officer corps, the author asked questions of the officer and enlisted Peshmerga. Huntington argues that enlistees do not have the same sense of responsibility to society, nor do they have the intellectual capacity for true expertise. The author would argue that the bureaucratic institutions that mark professionalism are still largely present in the enlisted ranks—promotion based on merit versus political affiliation and hierarchical structure marked contemporary enlistees in the American military more, not less, than officers. This is also compatible with the goals of SSR, which does not seek to depoliticize the officers while leaving junior soldiers enmeshed in connections outside the chain of command.

The survey posed twelve questions to assess the degree of professionalism. Two questions assessed the Peshmerga's desire to integrate partisan units. First: In your opinion, should all Peshmerga be integrated into one unit under the Ministry of Peshmerga? This is a very broad and theoretical, albeit direct, question. To get more concrete information, the following question was asked: Should the political party offices at the military camps be abolished? The elimination of party offices from military bases would be a logical implication of Peshmerga integration; a more practical framing, however, might influence the way that Peshmerga responded.

Next, the author assessed the degree that tribal dynamics influence unit structure. As noted previously, 93 percent of Peshmerga identified with a tribe; for each Peshmerga, if they said they belonged to a tribe, two follow-on

questions were asked. First, "Is your platoon commander a member of your tribe?" Second, "Is your brigade commander a member of your tribal leader's [sheikh's] family?"

Two questions assessed how meritocratic promotions were. First: Did you have to receive additional training to be promoted? This question requires explaining. In Western contexts, promotion to certain grades entails attendance of courses (e.g., Corporals Course for new noncommissioned officers up to career courses for senior officers). The issue with the Peshmerga is not that they lack the capacity for training; there are two staff colleges in Kurdistan, one at Zakho (for the KDP) and the other at Qalachulon (for the PUK). Rather, if promotions are not accompanied by additional training, it is indicative of promotions being driven by political concerns beyond consideration of job performance. The second question asked Peshmerga to state what factors their unit considered for promotion; if they answered "The support of a political party," this indicates that promotions are partisan and not meritocratic.

Next, the author assessed the existence of parallel structures in the Peshmerga. This question had to be delicately framed, as the participation in a parallel structure might not be known to other members of the unit, and the surveys were often not conducted privately regardless of circumstances. We asked, "Does your brigade commander have your cell phone number?" In Western militaries, the brigade commander (in charge of a couple thousand soldiers) would almost never have the cell phone number of individual soldiers, as they are separated by several layers in the chain of command. If brigade commanders are directly communicating with individual soldiers, it suggests a parallel structure, whether it be tribal ties, an informant network, or something else. Just asking about the brigade commander misses out on interesting phenomena such as reporting of Peshmerga to civilian authorities, but it seemed unlikely that we would get truthful answers to questions about that activity. This formulation was hoped to generate truthful answers to one facet of parallel structures, specifically the degree to which brigade commanders had connections to individual soldiers, whether this was because of tribal, party, or patron and client ties.

Three questions measured the importance of political activity in each unit. First, Peshmerga were asked whom they had voted for in the past election; if Peshmerga declined to answer, this indicates a social desirability bias against publicly proclaiming partisan allegiance. A stronger social

desirability bias against reporting voting behavior indicates a stronger norm of professionalism. Second, the Peshmerga were asked if they were card-carrying members of a political party. Third, they were asked how often the unit conducted ideological or political training; increased political indoctrination would indicate a less professional military.

Finally, there were two questions about the formation of small units. First, "Did you know your platoon commander personally before you joined your current unit?" and second, "Did you know most of the members of your platoon before you joined the Peshmerga?" In bureaucratic militaries, personnel are assigned to units after they join; if Peshmerga know which unit they are going to before joining, then it is likely that unit reflects a certain segment of society and is thus part of a subjective control arrangement.

If the previously discussed indicators show more professionalism in the integrated units, then this supports the assumption of SSR proponents that SSR can professionalize a partner force. This case should be an easy test for SSR because of the well-funded and longitudinal efforts to reform the integrated units.

Chapter 5. Empirical Results for Professionalizing the Peshmerga

Naïve Comparison: Integrated Units Have Slightly More Professionalism

In table 3, the author compares the responses to the questions about professionalism between partisan and integrated units using t-tests. T-tests use the variance of data to determine how confident the surveyor should be that a difference in means between two groups is due to an actual difference in the population and not due to chance error. The difference is usually considered significant if the resulting p-value is less than .05, which means that the surveyor can be 95 percent confident that there is a difference. Below are the percentage of Peshmerga in partisan and integrated units agreeing with each question and the p-value, if statistically significant.

While most of the differences are statistically significant, they indicate substantively minor effects. For example, while fewer Peshmerga in the integrated brigades knew their platoon commander before joining, 34.8 percent still indicated that they are being assigned to platoon commanders who they personally know; as professionalism requires random assignment to job locations based solely on aptitudes, this represents a significant failure of the SSR effort in Kurdistan. Thirty-five percent of integrated soldiers still believe that the favor of political parties is important for promotion, indicating the continued suffusion of partisan political concerns in the management of the integrated brigades. Thus, although several tests indicate statistically significant differences between partisan and integrated units, the substantive effects represent only minor improvements for the SSR effort.

Latent Variable Estimation Indicates No Difference between Partisan and Integrated Units

The following section describes a more sophisticated statistical technique that the author used to test if there is a difference in professionalism between the integrated and partisan units. Readers who are uninterested in methodology can read the result—integrated Peshmerga are not more professional than Peshmerga in partisan units—and skip to the next section.

JSOU Report 21-8

Table 3. Integrated Peshmerga are slightly more likely to answer questions about professionalism positively. Source: Author

	Partisan Units	Integrated Units	Significance (p – value)
Is your platoon commander in your tribe?	24.5%	22.9%	Insignificant
Did you have to receive additional training to be promoted?	68.5%	67.8%	Insignificant
Is your brigade commander a member of your tribal leader's family?	12.6%	8.5%	.009
Does your brigade commander have your cell number?	38.6%	21.8%	.000
Is the support of a political party important for promotions?	39.9%	35.0%	Insignificant
Does your unit ever conduct ideological or political training?	49.0%	24.5%	.000
Did the respondent say whom they voted for in the last election?	83.4%	69.6%	.000
Should all Peshmerga be integrated into one unit under the Ministry of Peshmerga?	98.3%	99.5%	.005
Should the political offices at the military camps be abolished?	83.4 %	91.8%	.000
Did you know your platoon commander personally before you joined your current unit?	43.2%	34.8%	.001
Did you know most of the members of your platoon before you joined the Peshmerga?	40.0%	36.2%	Insignificant
Are you a card-carrying member of a political party?	40.8%	31.9%	.000

The degree of professionalism can be modeled as a latent variable that is explained by the observed responses to the survey questions. In this model, there exists a latent variable z, representing the degree of professionalism for each Peshmerga. The probability of answering a question positively is determined by this latent variable. 113 As the degree of professionalism, which

cannot be directly measured, is the object of study rather than the responses to each question, this is a promising approach.

This latent variable can be estimated with item response theory (IRT). While IRT is usually used to measure aptitude (a latent variable) from test responses (observable variables), it has been used in political science contexts ranging from measuring ethnic sensitivities¹¹⁴ to the degree of partisanship. ¹¹⁵ IRT is the appropriate framework for the author's data set as the observed variables are dichotomous while the latent variable (professionalism) is continuous. The items can be recoded to mean that a 0 indicates professionalism while a 1 indicates the absence of professionalism. A general model for this probability for the m-th respondent in the i-th item is the following: ¹¹⁶

$$P(x_{im} = 1 \mid z_m) = c_i + (1 - c_i)g\{\alpha_i(z_m - \beta_i)\},\$$

where xim is the dichotomous manifest variable, zm denotes the examinee's level on the latent scale, ci is the guessing parameter, α i the discrimination parameter, and β i the difficulty parameter. The link function g is a logit. The discrimination parameter quantifies how well the item distinguishes between subjects with low and high standing in the latent scale, and the difficulty parameter expresses the difficulty level of the item. The guessing parameter represents the probability that an examinee with very low latent score responds correctly to an item by chance; this is an issue with standardized tests but not for this context. The author, therefore, estimates a parameter model without the c parameter.

The author estimates the model parameters using the ltm package in R. ¹¹⁷ This package uses Marginal Maximum Likelihood Estimation, where the parameters are estimated by maximizing the observed log likelihood where each sample unit contributes according to the following equation:

$$\ell_m(\theta) = \log p(x_m; \theta) = \log \int p(x_m|z_m; \theta) \ p(z_m) \ dz_m,$$

Where $p(\cdot)$ indicates the probability density function, xm denotes the responses of the mth sample, zm follows a normal distribution, and $\theta=(\alpha i,\beta i)$. The estimation procedure thus returns two parameters that can be used to evaluate the model fit and then calculate the degree of latent professionalism for each Peshmerga.

Table 4. The questions used in three item response models. Source: Author

	Model 1: All Items	Model 2: Discriminating Predictors	Model 3: No Tribal Variables
Is your platoon commander in your tribe?	✓	✓	
Did you have to receive additional training to be promoted?	>	>	✓
Is your brigade commander a member of your tribal leader's family?	>	\	
Does your brigade commander have your cell number?	>	\	
Is the support of a political party important for promotions?	>		✓
Does your unit ever conduct ideological or political training?	>		✓
Did the respondent say whom they voted for in the last election?	>		✓
Should all Peshmerga be integrated into one unit under the Ministry of Peshmerga?	>		√
Should the political offices at the military camps be abolished?	>		
Did you know your platoon commander personally before you joined your current unit?	/	✓	/
Did you know most of the members of your platoon before you joined the Peshmerga?	/	✓	
Are you a card-carrying member of a political party?	✓		✓

Some of the variables do not contribute much to the latent variable estimation when a model is estimated using all the variables. The α parameter represents how well the item discriminates between individuals with high and low levels of the latent variable. A good item should have α values over one, yet several of the items fall below this in the initial model estimation.

Another concern is that the latent variable being estimated might simply be tribalism. Around seven percent of Peshmerga did not belong to a tribe. Peshmerga who did not belong to a tribe were not asked questions depending on tribal affiliation (e.g., "Is your platoon commander in your tribe?") As

these values are then all missing in the analysis for non-tribal Peshmerga, one concern is that the latent variable being estimated is not professionalism but rather tribalism.

The author therefore devised two alternative models to address these concerns. Table 4 shows all of the variables that were asked and which models they were included in. Model 1 includes all of the questions. Model 2 only includes items that were good discriminators in Model 1. The relative performance of Models 1 and 2 tell the surveyor which is most efficient at measuring the latent variable of professionalism. Model 3 drops the questions that are contingent on tribal membership; if Model 3 performs the best, this indicates that the latent variable being measured in Model 1 is tribalism, not professionalism.

Model 2 performs the best by common metrics of IRT model fit. Two metrics of model fit for an IRT model are the Akaike information criterion (AIC)¹¹⁸ and the Bayesian information criterion (BIC).¹¹⁹ Both metrics are derived from the final log likelihood where lower scores indicate a better model fit. Table 5 shows the AIC and BIC for all three models. The AIC favors future prediction while BIC favors a parsimonious model.¹²⁰ Both criteria indicate that Model 2 is the superior model; Model 3's inferior performance also allays our worry that the underlying variable is tribalism when we want it to be professionalism.

Table 5. Model 2 performs the best of the three models. Source: Author

	Akaike Information Criterion	Bayesian Information Criterion
Model 1: All Predictors	27256	27393
Model 2: Discriminating Predictors	14096	14165
Model 3: No Tribal Predictors	19297	19388

The IRT model indicates no statistical difference in the level of professionalism between partisan and integrated units. From Model 2, a value of the latent statistic can be assigned—representing professionalism—to each Peshmerga. It is simple to conduct another t-test between the integrated and partisan Peshmerga to compare the two groups. The t-statistic for the test is -1.69 with a p-value of .09. The score indicates that the integrated units have less professionalism than the partisan controls, although again, this

difference is not statistically significant at the commonly accepted level of p<.05. The latent variable analysis thus indicates that integrated units have no more professionalism than partisan units.

Machine Learning Techniques Fail to Predict Integrated Status

Another useful quantitative exercise is to frame this as a prediction problem. Given their answers about professionalism, is it possible to predict if a Peshmerga is integrated or in a partisan unit? Generally, machine learning is focused on making predictions instead of explaining causal relationships, which is the focus of traditional statistical methods. Some have argued that conflict research should shift attention from causation to prediction in order to better serve policymakers. 121 Machine learning maximizes predictive power from an example data set using iterative algorithms that are computationally expensive, but that maximize the amount of information gained from a data set. While machine learning is not common in social sciences, it is widely used by businesses to leverage recent increases in data availability and computational power. While this section does not inform the surveyor about the causal relationship between integration and the indicators of professionalism, it is potentially enlightening to see if there is predictive information contained in the questions. If it is possible to predict a Peshmerga's integration status from their responses to the questions on organizational practices, then that tells the U.S. there is some relationship between the two; if we cannot, however, we would infer that no relationship exists.¹²²

Again, readers who are uninterested in statistical methods can take away the result and skip ahead. This final technique supports the finding that U.S. SSR efforts did not increase professionalism in the integrated brigades. Technically minded readers can continue and delve into the methodology.

First, the author imputed missing values on a data frame of relevant predictors using bag imputation. Most machine learning algorithms do not work with missing data. Missing data entered the survey when questions were either skipped by the enumerator or when they thought they had pressed a response button on the tablet but had missed. In a data frame of 39 demographic variables (such as the Peshmerga's age, education level, province of residence, etc.) for the 2,301 Peshmerga, there are 177 missing values. The author used bootstrap aggregation to impute values for these missing data. ¹²³ Bootstrap aggregation draws random samples from the data

with replacement so that the new data sets are the same dimensions as the original data, builds models based on these bootstrap samples, and then averages predictions across the models. The author implemented this using the caret package in R.¹²⁴ The result is that these 177 missing values are filled in according to the best prediction that can be made from the rest of the data.

Next, the author imputed missing answers for the professionalism questions using the matrix of imputed demographic predictors. The matrix of professionalism questions has 1,277 missing values; these come from the fact that soldiers (who have never been promoted) were not asked if they received additional training to be promoted,¹²⁵ and that 19.2 percent of Peshmerga declined to say whom they voted for. This matrix was combined with the matrix of demographic predictors (now with no missing values due to the previous bag imputation).

To predict integration status from the professionalism answers, the author used extreme gradient boosting. The basis of this algorithm is decision trees, a technique that splits data from predictors according to rules. Boosting creates many simpler trees (i.e., trees with fewer branches), building new decision trees based on the residuals of previous models. Gradient boosting then uses the learning rate between iterations of the boosting algorithm to enhance performance and efficiency. The author used the XGboost package to implement this algorithm, as it has proven effective in several machine learning competitions. The model built a predictive model out of 70 percent of the data. The 30 percent of the data that is not used to build the predictive model can then be used to test how well the model built from the 70 percent of data performs. As the test data was not used to build the model, it offers an accurate depiction of the model's performance; this process is called cross validation.

Peshmerga's integration status cannot be predicted from their answers to questions about professionalism using extreme gradient boosting. The model produced by XGboost achieved 80 percent prediction accuracy; that is, it correctly predicted whether a Peshmerga belonged to an integrated brigade or a partisan unit 80 percent of the time. While this might seem impressive, it is in fact poor compared to the no information rate. In the test population of 690 Peshmerga who were not used in the model-building phase, 80.87 percent belonged to partisan units. Thus, an algorithm that simply predicted that all Peshmerga were partisan would have performed better than the XGboost model. While the model has high sensitivity (predicting

95.5 percent of partisan Peshmerga correctly), it has low specificity (only predicting 14.39 percent of integrated Peshmerga correctly). A confusion matrix depicting the model's predictions against the actual observations is shown in table 6. If powerful iterative algorithms cannot make predictions based on observed responses, it can be inferred that questions about professionalism do not contain much information about integration status.

Table 6. The extreme gradient boosting algorithm fails to accurately predict integration status from the answers about professionalism. Source: Author

	Observed: Partisan	Observed: Integrated
Predicted: Partisan	533	113
Predicted: Integrated	25	19

Can the U.S. Professionalize Its Partners?

SSR has become the dominant paradigm for SFA and a popular tool for international organizations that hope to reduce violent conflict, but how can any particular SSR effort be evaluated? In this section, the author demonstrates one method of evaluating the success of SSR efforts in professionalizing a partner force; unfortunately, despite this being a case where the U.S. had invested a lot of time, effort, and money, it did not work. While naïve comparisons show some statistically significant differences between partisan and integrated units, these differences are substantively minor. More sophisticated methods fail to detect any difference. These negative results suggest both the need for additional research and caution from policymakers.

Additional research is needed to identify the contexts in which SSR efforts can succeed in professionalization. On the one hand, it is possible that outside

On the one hand, it is possible that outside interveners can never succeed in professionalizing a partner.

interveners can never succeed in professionalizing a partner. On the other hand, despite the Kurdish case involving heavy outside investment, it could have, in fact, been a hard case because of unmeasured contextual variables. The SSR effort in the KRG may have failed because it attempted to unify two separate militaries while the civilian government was still essentially divided. Perhaps military

integration cannot overcome political disintegration, but if attempted in

a context with a unified polity, it can be successful. This would be useful information not only for continuing efforts at reforming the Peshmerga, ¹³¹ but for SSR efforts around the globe.

Additional research could also explore ancillary benefits from SSR besides the goal of professionalization. Samii found that SSR efforts in Burundi mitigated ethnic animosity in soldiers who were integrated into an interethnic force. It is possible that mitigating ethnic animosity might be a feasible goal, but professionalization is not. While ethnic tensions in Burundi were defused, the military launched a *coup d'état* two years after the previously discussed study, demonstrating that they continued to be an unprofessional military. Other goals such as increasing respect for human rights might be attainable with SSR, but more research is needed.

In the meantime, this research suggests that policymakers should be cautious about SSR efforts. SSR represents a theoretically appealing paradigm because it promises to enhance both the practical goal of security and the moral goal of transferring our norms. The results presented here suggest that caution is needed. Policymakers might have to accept that there are tradeoffs (e.g., accepting the unprofessional nature of partners) that the U.S. must incur in SFA and UW efforts.

Conclusion. The Defeat of ISIS and Support to Resistance Outside of Europe—Lessons for the Future

This monograph has provided an overview of Kurdish politics, showed how coalition training improved the battlefield participation of Peshmerga, and detailed the incomplete professionalization of the Peshmerga's integrated brigades despite extensive U.S. investment. In order to maximize both the potential of future resistance movements and partner capacity, the lessons of the Peshmerga's war against ISIS must be studied.

Kurdish resistance to ISIS occurred under propitious conditions; whether these are necessary to future successes deserves further study. As documented in this monograph, Kurdish soldiers were motivated by nationalist fervor instead of for salary or material gain. This might have meant that SOF training landed on fertile soil which wouldn't be present in other resistance environments. Second, the Peshmerga had a secure rear area within which they could be trained and equipped in safety. If such a space is unavailable for future resistance forces, would this make resistance operations ineffective? In cases where a rear-area would not be available in the event of a hostile invasion, do resistance forces have to be trained beforehand to be effective? These are potential lessons from the Kurdish case study that should be reviewed in other contexts.

One broader question is: How much should we value knowledge of local conditions compared to more general skills? Previous JSOU monographs have discussed how SOF promote intercultural skills¹³² and the benefits that cultural intelligence brings.¹³³ However, SOF warriors cannot be masters of

everything; there are only so many hours in the day. Years spent learning Dari will have huge payoffs in Afghanistan yet will have no value if the mission shifts to Africa or Eastern Europe. The same argument can be made for investing the time to understand the history and nuances of a region. While this mono-

However, SOF warriors cannot be masters of everything; there are only so many hours in the day.

graph went into some depths on Kurdish history and politics, the tunnel always goes deeper; the head of the KDP's Zeravani force used to be in the

Kurdistan Workers' Party (PKK), the Kurdish governor of Kirkuk used to be Jalal Talabani's doctor, etc. How is it possible to know how much cultural study is enough? Time spent on cultural studies is also time that is not spent practicing warfighting skills. While it is easy to say that warriors should be excellent in all things, this is unfortunately not realistic.

One way to gain local knowledge without overburdening operators is to increase reliance on contractors. Contractors can be a quick way to surge knowledge about localities where SOF need to operate. To some extent, this transformation has already taken place, with a plethora of different companies offering local knowledge for hire. While many servicemembers instinctively dismiss the contributions of contractors, they have become a key part of the U.S. force structure for a good reason. While more operator knowledge is always good, any discussion of cultural intelligence in the operating forces should also mention contractors.

Another general question is how to improve the science of war, particularly as it relates to SFA and UW missions. Section two discussed some ideas about how to generate scientific knowledge, the difficulties in generating scientific knowledge about human events, and the logic of evaluating missions by input, output, outcome, and impact. While the U.S. should be humble about its ability to understand complex events, applying scientific methods to understanding SOF missions offers great potential benefits, particularly in understanding what conditions are likely to produce successful results. The current reliance on the art of war by practitioners might not be the best for producing general knowledge about SFA and UW.

Personnel leading SFA and UW training missions are unable to evaluate their own success for several reasons. First, the training personnel might develop some attachment to the partner force that would lead them to inflate their evaluation of partner capabilities. Second, the trainer will always be able to compare the partner force's capabilities after training to the partner's capabilities before training; therefore, they will always be able to detect some improvement. Trainers might not be able to see that the modest improvement that they observe is not proportional to the amount of effort and money that has been invested. Third, any trainer will only have a limited set of other missions that they have been involved in to compare with a particular SFA or UW mission. For example, they might be able to tell that their current mission in Niger is going better than their previous deployment in Afghanistan, but they have never done SFA or UW in Iraq, Burkina Faso, Latvia, or

any of the other countries where such missions might be conducted. Finally, operators on a training mission might succumb to cognitive biases; if they believe that they can improve their partners, then they will be prone to the confirmation bias and seek out positive evidence of partner performance while discarding negative evidence.¹³⁵ For these reasons, independent evaluations of SFA and, where possible UW missions, are advisable.

The independent evaluation of partner force training demonstrated here can be replicated in other contexts. Conducting a survey requires money, access, and expertise. Money is required to hire local academics who can help design, translate, pilot, and execute the survey. Even in war-torn countries like Iraq in 2017, there are local universities with capable faculty members and students. Compared to their countrymen, their wages are expensive because of their education and the mobile nature of the work (e.g., that they must go out and find people to survey). On the other hand, they are much cheaper than Westerners. Access to the target population (partner soldiers) should be easy to arrange if the U.S. is providing them with military training. There could be concern that these evaluations might overburden trainers; however, while there are experts in uniform who could oversee and analyze a partner force survey, there are also nonuniformed options.

The expertise to conduct these partner force surveys could be provided by contractors or academics. Just as there are contractors who can provide local knowledge, there are also contractors who are used to fielding and analyzing surveys. Academics are an appealing option, however, for a few reasons. First, they are much cheaper than contractors. Academics live off data sets and field interviews. An opportunity to get these data will be irresistible for many. It must be clear beforehand what is secret and what is unclassified. While the anti-government rhetoric of some academics might appear from the outside that academics are politically incompatible with SOF, there are pockets of academics who would embrace the opportunity to aid SOF missions. Accessing this pool of talent could enable rapid growth in the science of war.

A wider effort could answer the broader question about what conditions favor SFA or UW resistance missions. In the case of the Peshmerga, battle-field participation was a problem that coalition training efforts were effective in solving. In other cases, however, U.S.-trained forces have such large problems with battlefield participation that they *route en masse*. Is a strong ideology (e.g., Kurdish nationalism) necessary for SFA or UW to improve

JSOU Report 21-8

battlefield participation? Is it possible to produce the same positive results in partners who do not have strong nationalism? By comparing the Peshmerga against other cases around the world, the U.S. can build an understanding of the conditions that favor SFA and UW and then shape its future missions accordingly.

Another broad question is, "How much can be expected of SSR efforts?" In the case of the Peshmerga, the author showed that the SSR effort was not successful in producing professional brigades. This was the case despite the billions of dollars of equipment and training that the U.S. had invested. If that level of investment does not produce the desired outcome, is it worth making smaller investments? Might those just be wasted? If the Kurdistan region is a representative case, that might be true. However, the fracturing of civilian authority in Kurdistan may have made it unlikely that any amount of SSR effort would produce a professional military. If that is true, it would be possible to professionalize a partner military with a similar or smaller investment if the partner's government was unified. Confirming (or disproving) this hypothesis requires more research.

SOF lead the way in training partner forces how to resist conquest by mutual enemies. To continue this tradition into the increasingly complex twenty-first century requires rigorous analysis and deep thinking. Leveraging human capital in and out of uniform to survey partner forces is one way to build a base of knowledge and maintain dominance by, with, and through partners. The research described here is a first step toward assessing what works and what does not, but many unanswered questions remain.

Appendix 1. A Brief Description of the Kurds Represented in this Study

The Kurds are an ethnolinguistic group of around 40 million people who live in the mountainous areas on the borders between Turkey, Iran, Iraq, and Syria. ¹³⁶ In no state are they a majority of the population. Linguistically, Kurdish is related to Iranian Farsi; there are several Kurdish dialects that are mutually intelligible. ¹³⁷ The Kurds claim descent from the Medes, an ancient Iranian people who were absorbed into the Persian Empire around 550 B.C; however, historians argue that Kurds have only become more ethnically homogenous in recent centuries. ¹³⁸

The meaning of Kurdish history is contested by ethnic nationalists and their neighbors. Nationalist Kurds who desire their own state will emphasize their ethnic and linguistic differentiation from neighboring Arabs, Turks, and Persians; one Kurdish scholar the author met, for example, was on a mission to amass all the historical maps with Kurdistan labeled on them in order to bolster the claim that there was a historical country for the Kurds. The governments who have tried to assimilate the Kurds do the opposite and emphasize similarities between the Kurds and their neighbors; for example, until 1991, the Kurds of Turkey were classified as Mountain Turks by the Turkish government and prohibited from speaking their language in public. 139 At one meeting near Mosul, the author told a Peshmerga commander that he had just arrived in Iraq two days ago when the commander interrupted the author saying, "Kurdistan. You are in Kurdistan." Conversely, even saying Kurdistan to someone in Baghdad or Ankara might be objectionable. When airport security in Istanbul asked where the author was traveling from, he answered, "Northern Iraq," and was allowed to proceed. A colleague was asked the same question and answered, "Kurdistan." The agent put down his passport, and icily asked him to repeat himself. Thinking he had simply been misheard, the colleague slowly and loudly enunciated, "KURDISTAN." He was separated off for additional screening, although he was eventually allowed to proceed. Policymakers and operators can offend locals in an instant if they are not careful. While a separate JSOU monograph goes into more detail about cultural intelligence, 140 awareness of local

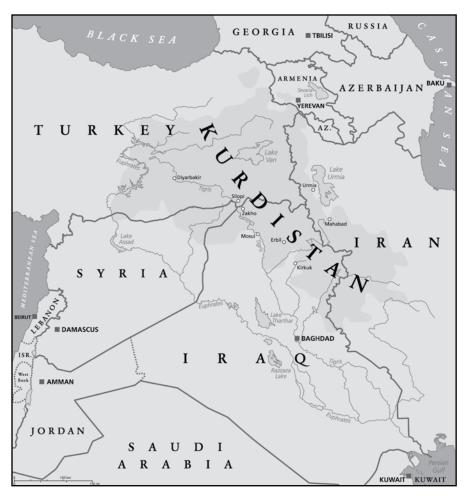


Figure 10. Large map showing the Kurdish region. Source: Shutterstock

sensitivities is always a good idea. Translators can often provide useful advice about dos and don'ts before any partner engagement.

The contemporary borders of Syria, Iran, Iraq, and Turkey were drawn in the wake of World War I; as the Kurds are the primary inhabitants of these border regions, this period of history bears examination. Founded in the thirteenth century by warlike Turks, the Ottoman Empire had become known as the sick man of Europe by the late nineteenth century. Hoping to reverse their fortunes, the Ottomans joined the central powers (Germany and the Austro-Hungarian Empire) during World War I against the Entente

powers (the United Kingdom, France, and czarist Russia). In retrospect, this was a bad decision. The Ottomans fought a losing battle against the Russians in the Caucuses. Although the Ottomans were able to hold off the British at Gallipoli, they were unable to stop the British advance through present-day Iraq, Israel, and Jordan. When the Ottoman government signed the humiliating Treaty of Sèvres in 1920, nationalist Turks rejected the concessions and overthrew the Ottoman government. Led by Kemal Atatürk, they dissolved the Ottoman Empire, forced Allied withdrawal from Anatolia, and gained Turkey recognition in its present borders with the Treaty of Lausanne in 1923.

This Turkish victory against the Allies after World War I in the Turkish War of Independence meant that there would be no Kurdistan in Turkish territory. While the Treaty of Sèvres had designated a Kurdistan region, the Treaty of Lausanne did not. As the largest numbers of Kurds lived in Turkey, this ensured that whatever happened in other countries there would remain a Kurdish question. Outside of Turkey, however, Kurds also failed to gain their own state.

Kurdish-inhabited territories south of Turkey were divided between the British and French during and after World War I. Iran (called Persia at the time) was effectively controlled by the British, and its borders were unchanged and continued to include large areas predominantly inhabited by Kurds. During the war, the British and French agreed to a division of Ottoman territory outside of Persia between their spheres of influence in the Sykes-Picot Agreement, named for the negotiators Mark Sykes and François Georges-Picot. In outlining his objectives for negotiations, Sykes stated that he wanted to create "a belt of English-controlled country" south of the line "from the 'e' in Acre to the last 'k' in Kirkuk."141 This divided the countries according to the arbitrary printing of letters on maps and not according to the characteristics of the people living therein. This was somewhat insensitive. The Arabs were dismayed because they had been promised land in exchange for fighting for the British under the guidance of Lawrence of Arabia. While they would be the majority in the new zones, they had to live under British and French direction in the new states of Syria and Iraq. However, what did this mean for the Kurds?

Although the Kurds now revile the Sykes-Picot Agreement, the nationalist feeling was not strong enough at the time to overturn it. Sheikh Mahmud Barzanji led a nationalist rebellion against the British after World War I. 142 One British officer noted that he had strapped to his arms a Qur'an, the texts

of Woodrow Wilson's twelfth point (of fourteen) on self-determination, and the text of an Anglo-French declaration¹⁴³ that they intended "the complete and definite emancipation of the peoples so long oppressed by the Turks and the establishment of national governments and administrations deriving their authority from the initiative and free choice of the indigenous populations."¹⁴⁴ While Sheikh Mahmud was a nationalist, not many of his contemporary Kurds were. Scholars often point to education as a critical enabler of mass nationalism¹⁴⁵ by creating a larger "imagined community."¹⁴⁶ As the Kurds were generally rural, education was low, which hampered the creation of nationalist sentiments that could have mobilized Kurds to resist their incorporation into neighboring states. Thus, the rebellion of Sheikh Mahmud was quelled by the British with the result that the Kurds south of Turkey were incorporated into Syria, Iraq, and Iran.

The absence of a Kurdish state and the late development of Kurdish nationalism means that the Kurds have been and continue to be fractured politically; this in turns mean that there is a Kurdish resistance in every country where Kurdish people are found. Kurds from one state will often seek aid from a neighboring state who, due to a rivalry with their neighbor, will gladly provide that aid as long as it suits that foreign government. Meanwhile, within each state, the central government will seek to empower one group of Kurds against their internal rivals in order to negate them both. This has led to the ongoing fracturing of the Kurds, making their political dynamics difficult to understand. The author explains those dynamics in the next section by examining the histories of the Kurds separately in their respective countries, specifically as it is relevant to contemporary American foreign policy.

The Kurds of Iraq: Historical Partners to the U.S.

As previously discussed, the Anglo-French Sykes-Picot Agreement created the state of Iraq in the wake of World War I. The borders drawn meant that it would be predominantly Arab. The Kurds, concentrated in the north and linguistically and ethnically distinct from the Arabs, have never fully accepted subordination to their southern Arab neighbors. Intermittent rebellions continued under the Iraqi monarchs, who were Sunni Arabs, and during whose reigns the country was a British protectorate.

The most important Iraqi Kurdish figure from the 1940s through the 1970s was Mullah Mustafa Barzani, whose family continues to dominate Iraqi Kurdish politics. Following an unsuccessful rebellion in 1941, he fled to the Soviet Union with his followers. He was named the president-in-exile of the KDP at its founding in 1946. He returned to Iraq in 1958, following a coup that overthrew the Iraqi monarchy. Large scale conflicts continued intermittently during the 1960s and 1970s between the KDP and governments in Baghdad that often changed due to *coup d'états*.

Baghdad's growing alignment with the Soviet Union led to American support of Kurdish rebels in 1973; however, the withdrawal of this support in 1975 caused the collapse of Mullah Mustafa Barzani's movement. 1972 Baghdad, then controlled by the Ba'ath party, signed a Treaty of Friendship with the Soviet Union. The U.S., Iran (led at this time by the pro-U.S. shah), and Israel supplied arms to Kurdish fighters (called Peshmerga, which translates to "those who face death"). Unfortunately for the Kurds, the Shah of Iran signed a treaty with Iraq in 1975 to mend fences; as part of that agreement, the Shah agreed to cut off supply to the Peshmerga. As the Iranian route was the only way to supply the Kurds, this also ended American and Israeli support. To this day, many Iraqi Kurds harbor bitter feelings toward Henry Kissinger, then Secretary of State, whom they blamed for this betrayal. Mustafa Barzani himself went into exile, first in Iran, then to the U.S. to receive treatment for lung cancer; he died at Georgetown University Hospital in 1979.

The collapse of Mustafa Barzani's movement also led to a split within the Iraqi Kurds between the Barzani-led KDP and the Talabani-led PUK. Jalal Talabani was the leader of the PUK from its founding in 1975 until his death in 2017; he is sometimes called *Mam Jalal*, "uncle," and his portrait is ubiquitous in the eastern part of Kurdish Iraq, where the PUK is strongest. He was married to Hero Ibrahim Ahmed, the daughter of Ibrahim Ahmed, who was one of Mullah Mustafa Barzani's principal lieutenants. In the PUK's narrative, they represent the non-tribal side of Kurdish nationalism in opposition to the Barzani's embrace of tribalism; this is true to a certain extent but can easily be overstated. In the survey of Peshmerga that will be described later, 98.8 percent of Peshmerga who voted for the KDP identified with a tribe while 88.2 percent of PUK voters identified with a tribe. The evidence, therefore, suggests that PUK's distancing from tribalism is more rhetorical than substantive.



Figure 11. Map showing the KDP and PUK territories. Source: derivative work: Rossche (talk) - "Iraq: Country Profile" [map], CIA, January 2003.

Meanwhile, the Ba'ath Party in Baghdad came under the control of Saddam Hussein in 1979. He turned the state into a personalist dictatorship that served the interests of a narrow band of Sunni Arabs against the majority Shi'a Arabs and minority Kurds. The victimization of Kurds increased in severity and scope under the Ba'athist regime; to bring the oil-rich city of Kirkuk under Saddam's control, an Arabization program deported Kurdish families and implanted Arab ones in their place (more on Kirkuk and the other disputed territories to follow). In response, more Kurds joined

the KDP's and PUK's underground movements in the cities or fled to the mountains to join the party's branches of the Peshmerga.¹⁴⁹

During the late 1980s, the government's repression of the Kurds tragically escalated when Baghdad launched the Anfal campaign, killing over 150,000 Kurds. ¹⁵⁰ This campaign was partially motivated by the fact that Iran, embroiled in a war with Iraq from 1980-1988, was supporting the Peshmerga in their guerrilla campaign against Baghdad. While Ba'athist victimization of Kurds was sometimes targeted at individuals, it was most often indiscriminate. Entire villages were razed and their inhabitants forced to move; the government also created free-fire zones where anyone moving would be targeted. The Ba'athists used chemical weapons in an attack on the city of Halabjah, killing over 5,000 civilians in a single day on March 16, 1988. ¹⁵¹ At the time, the U.S. response was muted due to the ongoing U.S. support of Saddam Hussein in his war against the fundamentalist regime in Iran (the shah having been overthrown in 1979). The attitude of the U.S. would change, however, following Iraq's invasion of Kuwait.

Saddam's invasion of Kuwait and subsequent threatening of Saudi Arabia provoked the U.S. to respond first with Desert Shield to protect the Saudis, then with Desert Storm to liberate the Kuwaitis. Following the Iraqi defeat, the Kurds launched an unsuccessful rebellion against Baghdad, following which the central government seemed poised to launch a fresh campaign of violence.¹⁵² Kurdish refugees flowed across the border to Turkey, igniting Turkish protests as they were in the midst of their ongoing counterinsurgency campaign against their Kurdish population. The U.S. stepped in and set up a no-fly zone that forced Saddam's ground forces to retreat from the Kurdish areas of Iraq. Massive humanitarian aid shipments to the Kurds, known as Operation Provide Comfort, saved many Iraqi Kurds from starvation and have helped to create lasting goodwill toward America. The no-fly zone allowed the Kurds to achieve de facto autonomy and kept Baghdad at arm's length. While continuing to have antagonistic relations with Baghdad, the Kurds also profited as intermediaries in Baghdad's oil smuggling (as Saddam was under sanctions).

The newfound autonomy for the Kurds, however, did not lead to the unification of the PUK and KDP; in fact, it led to a bloody civil war between the two from 1994 to 1998. A unified government in Arbil held elections in 1992, during which the PUK and KDP split the votes. Unable to transition to a civil power, the parties began fighting each other in 1994. In 1996, Mullah Mustafa

Barzani's son and head of the KDP, Masoud Barzani, partnered with Saddam Hussein to evict PUK forces from Arbil. This occurred despite Saddam Hussein having massacred thousands of men from the Barzan tribe during the Anfal campaign, mentioned previously. While U.S. pressure forced Saddam to withdraw quickly, the momentum swung in the KDP's favor. However, in 1998, the U.S. mediated an agreement between the two sides (called the Washington Agreement), which ended the civil war.

During the American invasion of Iraq in 2003, the Kurds cooperated with U.S. forces to accomplish several strategic objectives. When Turkey refused to give the U.S. permission to attack Iraq from the north using its territory, the U.S. partnered with the Kurds. ¹⁵³ One element of this cooperation was an attack on Ansar al-Islam, a terrorist group that had based itself in the remote mountains adjacent to the PUK's territory. The embedded U.S. advisors worked with the PUK ground forces to evict Ansar al-Islam and to occupy the oil-rich city of Kirkuk, while the KDP cleared the way to Mosul; readers interested in learning more can read another JSOU publication of a more detailed book, *Invisible Nation*, by Quil Lawrence. ¹⁵⁵ This cooperation set the tone for close U.S.-Kurdish relations during the otherwise turbulent U.S. occupation of Iraq.

Following the fall of Saddam in 2003, the Kurds accepted their status as a federal territory of Iraq. They maintained their own military and political structures as a federal entity, the KRG, with a capital in Arbil. The Kurds negotiated a favorable constitution; one key section allowed them to maintain control of new oil discoveries in their region, which helped to contribute to an economic boom. While the KRG was much safer than many other parts of the country, largely due to the efforts of the Peshmerga, there were still occasional suicide bombings by al-Qaeda in Iraq, ISIS's predecessor. Most dramatically, on February 1, 2004, two suicide bombers killed dozens of people including the deputy head of the KDP. This symbolic attack highlighted that the lack of violence in the KRG did not mean that Kurds and Arabs had reconciled but rather that deep-seated animosity was only contained by the overwhelming American military presence.

After the Americans withdrew from Iraq in 2011, the central government in Baghdad, now dominated by Shi'a Arabs rather than the Sunni Arabs, attempted to curtail Kurdistan's *de facto* sovereignty. Tensions centered around the disputed territories that lie between the KRG and the central government and that are claimed by both sides. At one point, the central

government precipitated fighting by attempting to send central government soldiers into the KRG to assert control, but most conflict was confined to economic and political measures.¹⁵⁷

Invasion by the predominantly Sunni Arab ISIS made the Baghdad and Arbil conflict briefly less salient. ISIS captured Mosul and many other territories from the Iraqi central government in June 2014. In August 2014, ISIS turned its sights to the north, committing widespread human rights abuses during their attack on the KRG. From 2014 to 2017, the Peshmerga rolled back ISIS from the north as Iraqi forces attacked ISIS from the south.

The attacks of ISIS were viewed by many Kurds as continuations of their previous suffering at the hands of the Ba'athist regime and their Sunni Arabs more generally. Many officials and military officers in the Ba'athist regime became high-ranking officials in ISIS. 159 Beyond the continuities in leadership, however, many see the war with ISIS as a continuation of the perennial struggle between Kurds and Arabs. One Peshmerga in the disputed city of Kirkuk described how, when he was four years old, his father was killed by Sunni Arabs in the Ba'athist government. "The same crimes that [the Ba'athists] committed against Kurds, such as [in the chemical gas attack on] Halabjah, have been committed by ISIS. The [ISIS] emirs are Ba'athists and allow for the killing of Kurds without any justification."160 A popular Peshmerga song has lyrics that, "[Arab] culture is decapitation and robbery ... abduction of women and destruction are their actions, as it has always been."161 Many Kurds ascribe to a narrative centered around an almost unbroken history of victimization over the last century, of which their war against ISIS was simply the latest chapter. The fact that 90.7 percent of Peshmerga the author surveyed thought that a majority of Sunni Arabs supported ISIS in 2014 is also indicative of the fact that Peshmerga see a strong continuity between Ba'athist and ISIS violence.

While the U.S. and Kurds cooperated closely during the anti-ISIS campaign, tensions arose over the supply of arms to the Peshmerga and the amount of territory the Peshmerga would liberate. First, it was worried that the supply of sophisticated arms would enable the Kurds to further separate from Baghdad; for American proponents of a unified Iraq, this would be a step backward. The Kurds were, therefore, annoyed that they were primarily limited to small arms and that all shipments to them had to go through Baghdad. The Kurds then argued that they could not advance into Arab areas occupied by ISIS because they were unequipped. From the perspective of

American officials trying to build a unified Iraq, the Kurds did not advance into non-Kurdish areas simply because they were only interested in seizing territory that they coveted and were not willing to make sacrifices to go beyond those borders. While these tensions were not fatal to cooperation, they cast a pall over U.S.-Iraqi Kurdish relations that made it harder to navigate later events.

The rise of ISIS strengthened the Kurdish view that coexistence in the same state with Arabs was impossible. This helped to galvanize a referendum on independence that was held in September of 2017. The referendum was championed by the head of the KDP and then-president of the KRG, Masoud Barzani. Critics of the KDP, particularly Americans in favor of a unified Iraq, argued that the referendum was a misguided effort to increase Barzani's control over the KRG. In this view, the quixotic drive for independence was an attempt by Barzani to gain supporters from other parties. Because other parties, particularly the PUK, were more realistic about the prospects of achieving independence, they did not provide full-throated support to the referendum, which would allow Barzani to gain political support. 162 No country except for Israel came out in support of the referendum. This led to the widespread belief in Washington that the Kurds would call off the referendum; when they did not, a last-minute effort was launched by then Secretary of State Rex Tillerson to negotiate a solution, but this proved too little, too late. 163 The referendum was held on 25 September with a landslide of 92.7 percent of voters favoring Kurdish independence. 164 Subsequently, critics would point to turnout rates of 50 percent in some areas as proof of lack of support by Kurds for independence.¹⁶⁵ A simpler explanation is that the Iraqi Kurds are very nationalistic and almost all want their own state; those who wanted their own state but did not want to face the fallout from a referendum stayed home instead of voting.

The Iraqi government responded to the Kurdish independence referendum by seizing the cities of Kirkuk, Sinjar, and Makhmur from the KRG. Of these, the city of Kirkuk is the largest and most significant because of its nearby oil fields. The seizure of Kirkuk occurred as a result of an Iranian brokered deal between a faction with the PUK forces and Baghdad. Shortly after the referendum, the leader of the PUK, Jalal Talabani, died after long suffering from the aftereffects of a stroke. The head of the Iranian Quds Force, Qasem Sulaymani, attended Jalal Talabani's funeral in Iraq. According to a spokesman for the PUK, at the funeral, Qasem Sulaymani

persuaded Jalal's sons to withdraw their forces from their positions in front of Kirkuk.¹⁶⁷ Sulaymani's ability to persuade them was helped by the fact that he had fought alongside Jalal Talabani against Iraq during the Iran-Iraq War. Thus, on 16 October, many PUK forces withdrew, allowing Iraqi forces to advance quickly into Kirkuk, flanking other PUK and KDP forces and forcing their withdrawal. This seemed to be a betrayal of Kurdish interest. Yet it does not seem to have hurt the PUK long term. For example, although the deputy head of the PUK criticized the Talabani family for this covert deal, he remained in the party.¹⁶⁸ When Iraqi popular mobilization forces armed with M1 Abrams tanks attempted to push past Kirkuk, they were stopped by KDP forces, and a stalemate developed.¹⁶⁹ In other areas, the Iraqi army made some advances before being halted.¹⁷⁰ Critics of the KRG and the KDP in particular saw the debacle that followed as an inevitable result of a strategic miscalculation;¹⁷¹ the Iraqi Kurds had lost control of territory by provoking the central government with an independence drive that was never going to succeed. Kurds, particularly those in the KDP, will argue that they were attacked for seeking self-determination. Whatever the perspective, the clashes between U.S. allies put the American government in an awkward position. But why was Kirkuk such a flashpoint between these two sides?

The Disputed Territories of Iraq

For Americans dealing with the Iraqi government or the KRG, a more detailed explanation of the background and significance of these disputed territories is now in order.

The disputed territories refer to a belt of territories that lie on the fault line between the Kurdish majority areas and the Sunni-Arab majority areas. While Shi'a Arabs are the most numerous in Iraq, they are concentrated in the south; the north and west are predominantly Sunni Arabs. Complicating this is a collection of the other minority groups, most notably Turkmen, who are present in the disputed belt stretching from Ninawa to Diyala. The city of Kirkuk, lying at the fault line between the Sunni Arab areas and the predominantly Kurdish areas, has been central in the disputes. According to a census in 1957, 48.3 percent of the city spoke Kurdish as their mother tongue, 28.2 percent Arabic, 21.4 percent Turkish, and 2.1 percent did not identify by their mother tongue, being mostly Assyrian Christians. ¹⁷²

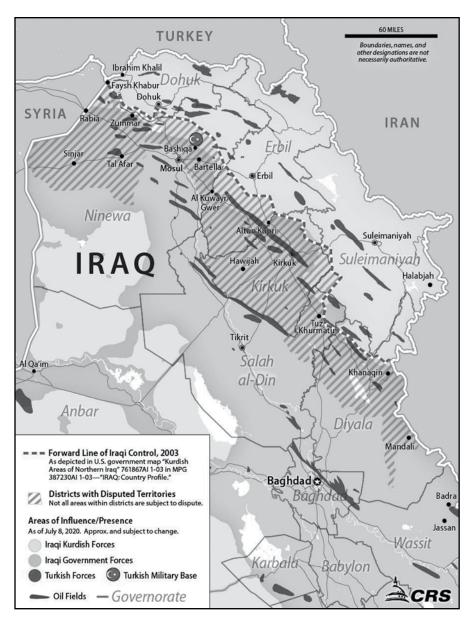


Figure 12. Map of Iraq Disputed Territories. Source: Congressional Research Service

By importing Arabs into the area while expelling Kurds and Turkmen, successive central governments (dominated by Sunni Arabs) hoped to strengthen their control of the disputed territories. The ascension of Saddam Hussein did not lose a resolution to the conflict but rather an intensification. Around 300,000 Kurds were displaced from Kirkuk, and the ones who remained were subject to economic discrimination and forced to join the Ba'aths. 173 In the al-Anfal campaign from 1986-1989, Saddam Hussein's forces systematically destroyed Kurdish villages and massacred somewhere between 50,000 to 100,000 civilians throughout the north. While Kurds were the primary target, other minority communities in Iraq including Assyrians, Shabaks, Iraqi Turkmens, Yazidis, and Mandeans were also targeted. 174 Saddam also intensified the Arabization of Kirkuk, even shifting the borders of the governorate in a move of ethnic gerrymandering to make the province more solidly Arab. The Kurdish-populated districts of Kalar and Chamchamal were given to the already majority-Kurdish governorate of al-Sulaymaniyah, while the Arab-majority districts of al-Zab and al-Hawija were attached to Kirkuk. The result of these actions was that by a 1997 survey, 21 percent of the governorate was Kurdish, 72 percent Arab, 7 percent Turkmen, and only .3 percent other.¹⁷⁵ The Arabization program had been effective in turning the Arabs from a minority into a solid majority.

The American invasion and occupation in 2003 led to the spread of Kurdish *de facto* control in much of the disputed territories. The Peshmerga, in conjunction with American special forces, made great advances in the north, including taking Kirkuk on 10 April 2003. While there were several reports of looting, attacks by the Kurds against Turkmen, and forced expulsions of Arabs, these appear to have been exaggerated. U.S. forces took control of Kirkuk from Kurdish forces two days after the Kurds seized the city. The strain on U.S. forces and the relatively nonviolent situation in the disputed territories, however, meant that the U.S. often outsourced security to the Kurds. The Peshmerga continued to hold important security functions and controlled half of Kirkuk even after the U.S. withdrew in 2011.

The legal status of the disputed territories was, unfortunately, left unresolved during the American occupation. As the new Iraqi constitution (promulgated in 2005) was silent on the borders of the KRG, the *de facto* 2003 Green Line continued to demarcate the limits of the KRG. Article 140 of the new Iraqi constitution provided for a three-step process in resolving the legal status of the disputed territories—normalization (de-Arabization),

a census, and a referendum, all of which were to take place by 31 December 2007.¹⁷⁶ While the process of normalization had begun under the interim constitution, the entity in charge, the Iraqi Property Claims Commission, moved at a glacial pace, only resolving 25 cases of the more than 10,000 presented in its first year.¹⁷⁷ The fact that some Arabs had been forced to move to Kirkuk by the Saddam regime and that many Arabs were now second or third generation inhabitants of the area were the main obstacles to the determination of who was a legitimate owner of property. Many Kurds were incentivized to return to Kirkuk with payments of \$8,300; Arabs were paid twice that to leave.¹⁷⁸

The failure to hold a constitutionally mandated referendum in Kirkuk further alienated the KRG and Baghdad. With the official "normalization" process effectively stillborn, many Kurds returned to Kirkuk outside of a legal settlement, which did nothing to allay the fears of other ethnicities.¹⁷⁹ According to Denise Natali, "Open borders, de-Ba'athification processes, and land reclamations have encouraged voluntary and forced expulsions of Arabs from Kirkuk to southern and central Iraq and migration of Kurds back to the city."180 Without having gone through a legal normalization or a de-Arabization process, no side wished to fulfill the second step of Article 140—a census. Finally, while the Kurds were eager to move to the third step, a referendum that they believed would validate Kirkuk's and other disputed territories' attachment to the KRG, they were stymied in this effort by the central government and an American occupation that did not want to provoke further inter-ethnic conflict. The result was that the legal solution to the status of the disputed territories, which had been agreed to by all the ethnic parties during the drafting of the constitution, was not implemented. This suggests that any future resolutions of the conflicts based on popular censuses and referendums might encounter similar difficulties in implementation.

Tensions between the KRG and Baghdad over the disputed territories increased after the American withdrawal in 2011. Disputes over whether the KRG was getting its proper share of the budget escalated. The highly centralized and sectarian government of Prime Minister Nuri al-Maliki attempted to force the Peshmerga out of the Diyala province, resulting in skirmishes and deaths on both sides. Baghdad blacklisted certain oil companies who were working in the KRG, and President Mas'oud Barzani threatened secession. While wider violence was avoided, tensions remained high.

The invasion of ISIS and the subsequent liberation of most of the disputed territories by the Peshmerga established *de facto* Kurdish control of the disputed territories to a greater extent even than in 2003. As Iraqi government forces abandoned portions of the disputed territories ahead of ISIS's advance in June 2014, the Peshmerga filled the void and seized control of many areas, including the whole city of Kirkuk.¹⁸²

As described previously, the Kurds were again ejected from the Kirkuk, Sinjar, and Diyala provinces following their independence referendum in 2017. While the handover was not bloodless, it did not lead to a wider civil war as some had feared.

The disputed territories, and Kirkuk in particular, continue to be important for symbolic and economic reasons. Symbolically, the Kurds have referred to Kirkuk as "our Jerusalem." Many controversies have ignited over the flying or the banning of the Kurdistan flag. Economically, the main oil field produces around 300,000 barrels per day, although it could produce more if its neglected infrastructure was overhauled. The main pipeline used to transport the oil to the north through Turkey was ruined by ISIS, requiring oil to move through a KRG controlled pipeline. The flow of this oil through Turkey has been occasionally interrupted by bombings by Turkish Kurds, who themselves are friendly neither with the Turkish government nor with the KDP. The next section discusses the Kurds of Turkey.

The Kurds of Turkey: The Enemy of a Friend?

The history of the Kurds in Turkey is one of conflict. As noted previously, the use of the Kurdish language was forbidden by the Turkish government until 1991; similarly, Kurds were classified as mountain Turks in official censuses. The words, Kurds, Kurdish, or Kurdistan have been banned at times. The effort by the Turks to assimilate the Kurds was unsuccessful, leading to violent conflict.

The main group representing the Kurds in Turkey is the Kurdistan Workers' Party, known by its Kurdish initials PKK. The PKK was founded in 1978 as a Marxist-Leninist group that advocates self-determination for the Kurds in Turkey. By 1984, the party was strong enough to launch an insurgency against the government. This insurgency lasted until 1999, during which tens of thousands of people died. The PKK was aided by the Syrian government and established bases in the mountainous areas of Iraq and Iran, which it

still possesses today. Due to the violent tactics of the PKK and the status of Turkey as a North Atlantic Treaty Organization ally, the PKK was designated a terrorist group by the United States. The insurgency only ended in 1999 when the founder of the PKK, Abdullah Öcalan, was captured. A second insurgency ran from 2004-2012, during which a cease-fire was agreed upon, and a peace process started.

The PKK's current insurgency against Turkey dates to 2015 and has its origins in the success of the Syrian Kurds. After taking control of northeastern Syria from the Syrian government, the Syrian Kurds soon found themselves attacked by ISIS. During the siege of Kobani by ISIS, the Turkish government initially refused to allow the flow of supplies to the besieged Syrian Kurds, only yielding under strong international pressure. This raised the suspicions of Kurds in Turkey, who believed that Turkey was aiding ISIS. When a bomb exploded at a Kurdish student protest in Suruç, the closest town in Turkey to Kobani, the PKK responded by killing two Turkish police officers. This led to an escalating series of attacks on both sides that has marked a new, third wave of insurgency. But why did events in Syria mobilize the Turkish Kurds when, say, the attacks of Saddam Hussein did not?

The Kurds of Turkey have a greater affinity with the Syrian Kurds than with the Iraqi Kurds because both follow the teachings of the founder of the PKK, Abdullah Öcalan. He is popular because he is known as the intellectual father of a revolutionary ideology that represents the main alternative to tribal nationalism for the Kurds in all countries. Educated in Ankara, he founded the PKK in 1978 before being forced to flee to Syria. He directed the PKK's insurgency against Turkey from Syria until the thawing of relations between Damascus and Ankara led to his expulsion from Syria. In 1999, he was captured in Nairobi by Turkish intelligence, aided by the American Central Intelligence Agency. He has been imprisoned since that time yet will occasionally be permitted to make pronouncements or allowed to write letters from prison. This ideology is sometimes called Apoism, which derives from Öcalan's nickname Apo or uncle. While originally a far-left ideology that advocated an independent state for the Kurds, it has evolved somewhat, with most Apoists believing in a democratic confederation for Kurds in Turkey. Still, as a leftist ideology, it technically opposes nationalism—they advocate instead for self-determination that conveniently would allow for Kurds to self-determine into autonomous regions. It also advocates for female equality—female guerrillas are frequently seen in Apoist ranks yet are almost absent among the tribal Kurds.

The PKK is unofficially represented in the Turkish government by the Peoples' Democratic Party, or HDP in Turkish initials. The Turkish government maintains that the HDP is synonymous with the PKK, although this is contested by the HDP. The HDP's ideology does mirror that of the PKK, and Abdullah Öcalan's niece and nephew are parliamentarians for the HDP. The Turkish government has imprisoned several members of the HDP and contested their ability to participate in elections.

While Apoism is dominant in Turkey, it is not universal among Turkish Kurds. Many Turkish Kurds, particularly in rural areas, still favor the tribalism that is dominant among Iraqi Kurds. In 2013, the KRG President Masoud Barzani visited the Turkish-Kurdish city of Diyar Bakr with Turkish Prime Minister Recep Tayyip Erdoğan. Iss This outreach to Kurds, combined with the then ongoing ceasefire with the PKK, was a strategy of Erdoğan to attract the non-Apoist Turkish Kurds. However, Erdoğan's effort to woo them to his party was largely unsuccessful. The failure of Erdoğan to garner significant numbers of Kurdish votes helped sway Erdoğan to believe that he was better off fighting the Kurds and thereby rallying nationalist Turks to his party; this has led inexorably to the intervention of Turkey in Syria against the Syrian Kurds. We turn next to this third group of Kurds.

The Kurds of Syria: New Partners

The situation of the Kurds and Arabs in eastern Syria has already been covered in detail in another JSOU monograph. ¹⁸⁹ In this section, the author presents an abbreviated history of the Syrian Kurds, the current situation, and an exhortation to read the other monograph for those interested in learning more.

The dominant Kurdish organization in Syria is the Democratic Union Party (PYD in Kurdish initials), which is an Apoist party. Its Kurdish military is the YPG, organized under the pan-ethnic umbrella of the SDF; the YPG is the driving force in the SDF. The PYD is the dominant force in what is commonly referred to as Rojafa, the West, or more technically the Autonomous Administration of North and East Syria. YPG fighters admire Abdullah Öcalan and carry banners of him and displayed them openly during the victory celebration in al-Raqqa. 190

The PYD is associated but not synonymous with the PKK. The extent of this association is disputed. The Turkish government sees the PYD as the Syrian branch of the PKK. The prime minister of Turkey, Recep Tayyip Erdoğan, refers to the PYD as the "PYD/PKK;"191 Turkish media, both state and non-state affiliated, often echo this label.¹⁹² Around half of the YPG's published martyrdom notices, a list of soldiers who have died fighting ISIS, are of Kurds from Turkey, indicating substantial cross border influences. 193 On the other hand, the two groups have separate command hierarchies. The PKK itself has been fractured since the capture of Öcalan, making any direct control over the PYD impossible. Syrian Kurds are careful to maintain their separation from the PKK.¹⁹⁴ However, the self-serving nature of this denial makes these claims less plausible; if the international community believes that the PYD and PKK are entirely separate, it facilitates the giving of aid to the PYD and makes Turkey's measures against the PYD less legitimate. However, the YPG has been scrupulous about not allowing the PKK to use their territory in Syria as a base of operations for attacks against Turkey. While the PYD and PKK are not synonymous, they do share strong ties and a common ideology. Americans would be inclined to treat the PYD with cold distance. However, U.S. alignment of interests with them and their proven combat effectiveness have led to a new partnership.

Despite its association with a designated terrorist group, the PYD was the principal U.S. partner in the anti-ISIS campaign in Syria. The relationship began with airstrikes in support of the YPG's defense of Kobani against an ISIS attack. From there, the U.S. provided an increasing number of weapons, non-lethal equipment, and advisors to the PYD.¹⁹⁵ The failures of the Arab partners of the U.S. against ISIS made this partnership attractive to the United States.¹⁹⁶ The SDF liberated Manbij in the west, ISIS's capital at al-Raqqa, and all of ISIS's territory to the border with Iraq. However, these successes have alarmed the U.S.-Turkish allies.

Turkish fears of Kurdish nationalism have caused U.S.-Turkish tensions to rise in tandem with the increasing support of the SDF by the United States. As the PKK is conducting an insurgency against the Turkish government and the PYD is associated with the PKK, Turkey fears that the PKK will eventually be able to use the PYD's territory in northern Syria as a base of operations. While the PKK and PYD have thus far refrained from doing this, the PKK does have several bases in northern Iraq and Iran, adding legitimacy to Turkey's fear. In response to the PYD's gains, Turkey invaded

the PYD's isolated territory of Afrin in the western part of Syria. While further attacks against the PYD in Manbij were averted by U.S. diplomacy, ¹⁹⁷ tensions remain high.

The PYD's Apoist ideology also alienates those Syrian Kurds who are more tribal in outlook. These Syrian Kurds are represented by the Kurdish National Council (the KNC or ENKS in Kurdish initials). The KNC was founded in Arbil, Iraq, under the auspices of Masoud Barzani in 2011. While initially incorporating many Syrian Kurdish parties, it has lost support over time as the PYD grew in strength and various minor parties defected or split apart. They have a military wing that has been trained in Iraq and serves in the KDP's Zeravani unit. While the KNC represents an alternative ideology for the Syrian Kurds, its activities are limited within Rojafa itself, both as a result of its loss of support and from the PYD's suppression; for example, the head of the KNC was arrested by the PYD and deported to Iraq. Department of the Iraq. The PYD and deported to Iraq.

Despite these concerns, the PYD's demonstrated battlefield and political effectiveness means that the U.S. would be unwise to dissolve its partnership. One recent article coauthored by the former U.S. ambassador to Turkey argued that increased discussion and signaling could mitigate Turkish anxieties;²⁰² however, this is overly optimistic. American support to the PYD fundamentally conflicts with Turkey's interests—no amount of discussion will change that. Without American support to the PYD, Turkey would likely attempt a cross-border attack to crush Rojafa. However, the U.S. dissolving its partnership with the PYD would require a callous betrayal on its part while hindering the continued efforts to suppress ISIS. The U.S.-PYD partnership has been an unexpected boon for the U.S. in the region; on the opposite end of Kurdish-inhabited territory in Iran are other Kurds who might play a similar role.

The Kurds of Iran: Potential Partners

Americans have had the least interactions with the Kurds of Iran, despite Iran's significance in American Middle Eastern policy. There are around seven million Kurds in Iran, accounting for around nine percent of Iran's population.²⁰³ Naturally, they are clustered in the western part of the country on the borders with Turkey and Iraq.

Increasing geopolitical tensions with Iran could make a partnership with the Iranian Kurds advisable, similar to the U.S. partnership with the Syrian Kurds. While Iran was a steadfast American ally under the shah, the revolution of 1979 installed the current theocratic regime who view America as an implacable foe. Efforts to manage Iran's nuclear program with the Joint Comprehensive Plan of Action seem to be defunct at the time of writing in July 2019. The recent attacks on oil tankers in the Gulf of Oman²⁰⁵ and the shooting down of a U.S. surveillance drone²⁰⁶ increased the possibility that a long-standing rivalry could turn into active hostilities. American operators and policymakers contemplating this escalation should consider the Iranian Kurds as potential partners.

Iranian Kurds are the only Kurds to have had a state in the twentieth century. During World War II, control of Iran was split between the British and the Soviet Union. While the Soviet Union had agreed to withdraw after the war, they fostered Kurdish and Azeri nationalism during the occupation and induced them to declare independence from Iran. The Kurds established the Republic of Mahabad, in which the KDP was founded. The U.S., British, and Iranian pressure caused the Soviets to withdraw their support, and the Republic of Mahabad was dissolved in the same year it was established (1946). The President, Qazi Muhammad, was hanged in 1947. The state, however brief its existence, has become a powerful symbol for all Kurds, yet this symbol has not prevented the Iranian Kurds from becoming politically fractured.

Like Kurds in other countries, the Iranian Kurds are divided, principally between the tribalists and the Apoists. None of the groups are dominant. Almost all are involved in armed struggle against the Islamic Republic.

The principal Apoist organization is the Kurdistan Free Life Party (PJAK). PJAK was founded in 2004 and has been involved in a continuous guerilla campaign against the state, interrupted by a cease-fire between 2011 and 2016.²⁰⁷ The PJAK's ideological and material ties to the PKK resulted in its designation by the U.S. as a terrorist organization in 2009.²⁰⁸ While PJAK has proven its ability to strike at the Iranian regime from bases in Iraq, its status as a terrorist group would make any U.S. support of PJAK difficult. Readers interested in learning more about PJAK can read about the party in an article from the Combatting Terrorism Center Sentinel.²⁰⁹

The principal tribal Kurdish group in Iran is the Kurdish Democratic Party of Iran (KDPI or HDKA in Kurdish initials). Founded in 1945 by the president of the Mahabad Republic, Qazi Muhammad, the KDPI is the oldest

and possibly the largest political organization for Iranian Kurds. They led a failed bid for independence following the Iranian Revolution in 1979²¹⁰ and a period of low-level insurgency from 1989 to 1996. In 2017, the fighting renewed between the KDPI and the Iranian government.²¹¹ It is unclear if this was initiated by the Iranian regime or by the KDPI leadership, who might be emboldened by Kurdish successes in Syria and Iraq.²¹² These clashes led to Iranian missile strikes²¹³ and the assassination of a KDP commander in Iraqi Kurdistan.²¹⁴

The KDPI is divided between a violent and non-violent group, further complicating the situation. The smaller, non-violent faction also calls themselves the Kurdistan Democratic Party, which can lead to some confusion. The initials PDK are used for this smaller group in English media to distinguish them both from the Iraqi KDP and the larger Iranian Kurdish party, the KDPI.²¹⁵ The PDK advocates a non-violent approach to relations with the Iranian government, which puts them at odds with the KDPI.

Finally, there is the Kurdistan Freedom Party (PAK). Politically, they are not Apoist but less aligned with the Iraqi KDP than the KDPI. They fought alongside Iraqi KDP forces during the war against ISIS, as recounted in the introductory vignette to this section. There, they held an important section of the front near Kirkuk under the command of Hussein Yazdanpana. During the anti-ISIS campaign, they received equipment and training from the Western anti-ISIS coalition. The PAK attacked an Iranian military parade in April 2016, reigniting its conflict with the Iranian state. The unit was also involved in clashes with the Iraqi Shi'a militias who advanced on Arbil after the central government seized the city of Kirkuk. An insurgency by PAK against the Iranian government continues.

Iranian Kurds are potential partners if tensions with the Islamic Republic of Iran boil over into overt conflict. While the Apoist movement in Syria (the PYD) was not designated as a terrorist group, the Iranian Kurdish Apoist movement (PJAK) is—this makes it hard to see them as a potential partner. The KDPI is militarily active in Iran but is internally divided. Of the principal parties, the PAK would be the most likely Kurdish partner in the event of increased hostilities. They have been trained by Western forces and are already conducting an insurgency in Iran. While it is hoped that U.S.-Iranian tensions are defused in the future, it is wise to follow Vegetius' adage *Si vis pacem, para bellum* (If you want peace, prepare for war)."220

Acronyms

AIC Akaike information criterion

BIC Bayesian information criterion

IRT item response theory

ISIS Islamic State of Iraq and Syria

JSOU Joint Special Operations University

KDP Kurdistan Democratic Party

KDPI Kurdish Democratic Party of Iran

KIA killed in action

KNC Kurdish National Council

KRG Kurdistan Regional Government

LASSO least absolute shrinkage and selection operator

OLS ordinary least squares

PAK Kurdistan Freedom Party (in Kurdish initials)

PJAK Kurdistan Free Life Party (in Kurdish initials)

PKK Kurdistan Workers' Party (in Kurdish initials)

PUK Patriotic Union of Kurdistan

PYD Democratic Union Party (in Kurdish initials)

SDF Syrian Democratic Forces

SFA security force assistance

SOF Special Operations Forces

SSR security sector reform

UN United Nations

JSOU Report 21-8

UW unconventional warfare

WIA wounded in action

YPG People's Protection Units

Endnotes

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JSOU Report 21-8

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JSOU Report 21-8

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