

Military Service, Combat Experience, and Civic Participation

May 5, 2020

Abstract

Military service is a highly social—and potentially socializing—experience. However, the long-term social effect of military service is a little-studied topic, and some have dismissed any direct impact of service on civic participation (Putnam 2000). Using data from a large, national survey our estimates show, in contrast, that the likelihood and intensity of group participation is higher among veterans than other men and that combat veterans have the highest level of participation. Mettler (2002) argued that education funded through the GI Bill gave veterans both resources (“civic capacity”) and a desire to reciprocate to society (“civic predisposition”) for the generous benefits they received, but she did not allow for the possibility that service *itself* could also increase both civic capacity and predisposition. Furthermore, our estimates confirm that education is strongly associated with higher civic participation and that the association between military service and participation is largely independent of education.

1. Introduction

The story of the returned warrior is an old one, told repeatedly from the time of Homer's epic poem *The Odyssey* to modern films like *The Best Years of our Lives*, *The Deerhunter*, and *American Sniper*. The ubiquity of these tales across time and place suggests that people are captivated by the issue of war's impact on the soldiers who fight them and the communities to which they return.¹ This is no less true of scholars, who have examined in great quantity and depth everything from the effects of combat experience on violence, domestic abuse, and criminal behavior (recent examples include Gartner and Kennedy 2018; Cesur and Sabia 2016; Teachman and Tedrow 2016; MacManus, et al 2015, Anderson and Rees, 2015) to the physical and mental health effects of wartime service (recent examples include Lee et al 2019, Nassif et al 2019, Griffith 2019, Godfrey et al, 2015) to how combat might impact the political attitudes and behavior of veterans (Grossman, Manekin, and Miodownik 2015, Horowitz and Stam 2014, Blattman 2009, Teigen 2006). Given the demanding tempo of military operations since 9/11 – with the United States alone having deployed roughly 3 million troops over the last 20 years (Wenger, O'Connell, and Cottrell 2018) – it is particularly important to understand how war impacts veterans and how they, in turn, affect our society.

This article examines one important issue in this area: whether military service and combat experience significantly affect the level of civic engagement of our returning soldiers. We are looking to see whether veterans, especially those with combat experience, are more or less active in their communities. Following Robert Putnam's seminal work on civic engagement, the social capital literature exploded and is quite broad, but scholars have still given little attention to the specific role military service may play with respect to social capital accumulation.² We aim to help fill that void by looking at a particularly important aspect of social capital: civic participation. We find that those who perform military service are more likely than their fellow citizens to be civically engaged. Indeed, they participate in the kinds of intermediary institutions that Alexis de Tocqueville (1835/1840) celebrated at significantly

¹ For reader ease at the cost of descriptive accuracy - and with apology - unless otherwise noted, we use the term soldier in this article to refer to all members of the Armed Forces - soldiers, sailors, airmen, and Marines alike.

² Indeed, earlier this decade, Kage (2010: 97) noted that even the broader subject of war and civil society has not been systematically studied: "few studies have considered, in a theoretically and empirically systematic fashion, the extent and manner in which war itself may have transformed civil society in post-conflict societies." And for evidence of the enormous growth in research on social capital, as well as introductions to the subject, see Halpern, 2005: 9; Field, 2003: 4; and Castiglione, van Deth, and Wolleb, 2008.

higher rates than others. And even more interesting, those who faced combat are even more civically engaged than other returned soldiers. In short, warriors are not among those who “bowl alone” in contemporary America.

2. Conceptual Background

The aim of this article is to examine the relationship between military service, combat experience, and civic engagement. In the process, we hope to explicitly contribute to the large literature on social capital given that civic participation is both a means to the formation of social capital and a critical indicator of its existence.³ In particular, by bringing in neglected military variables, we seek to round out our collective understanding of the determinants of social capital. Of course, civic engagement is important to individuals and societies for many reasons other than social capital formation, further justifying its value as a subject of inquiry. These include civic participation’s relation to individual and country-level quality of life and happiness (Wallace and Pichler, 2009: 271), economic and political outcomes (Fukuyama, 2000; Gilman, 2017), social welfare provision (Beito, 2000), public opinion and civic vitality (Bryce 1888: 45), and other key socio-economic and political variables. We also aim to better our knowledge of the specific effects of military service and combat experience on individual soldiers, their families, and the broader communities in which they live.

Unfortunately, the link between military service and civic engagement of any kind has been largely ignored by social scientists. Even when it is touched on, military service is relegated to the sidelines. For example, Robert Putnam rules it out as an influence on social capital in a mere footnote (Putnam, 2000: 485, FN41), briefly mentioning that his analysis using the GSS shows no impact of military service for WWII veterans. This oversight is surprising given that war in general has had huge effects on the lives of soldiers and civilians as well as being understood as a crucible for so many aspects of political life, political institutions, and civil

³ There is some controversy about what social capital is and whether those who study social capital have adequately operationalized it in their research (Halpern, 2005, 9-10). Roughly speaking, social capital refers to social networks and the norms and trust that develop amongst individuals in these complex relationships. Civic participation is a critical indicator for social capital and a key element of the formation and maintenance of the networks, trust, and norms at the heart of the concept. Unfortunately, as many have pointed out, there are many problems with such definitions and operationalizations. However, it is not our task here to sort out these important problems. On social capital, see Hanifan, 1920; Coleman 1988; Putnam, 1995; Fukuyama 2000; Putnam 2000; Field, 2003; Ostrom and Ahn, 2003; Putnam 2004; Halpern, 2005; Castiglione, van Deth, and Wolleb, 2008; and Field, 2016.

society (see, among many others, Tilly, 1975; Tilly, 1990; Porter, 1994; Modell and Haggerty, 1991; Kryder, 2000; Karsten, 1978; Ruger, Wilson, and Waddoups, 2002; Higgs, 1987; Skocpol, 1992; Kier and Krebs, eds., 2010; Sparrow, 2011; Wimmer, 2014; Obinger, Petersen, and Starke, eds., 2018; Ralston and Krebs, 2018). Nonetheless, a few scholars have tried to fill this lacuna regarding the specific roles of military service and combat experience; the next section of the paper describes and examines this literature.

2.1. Military Service & Civic Participation

Surprisingly, given its central role in the history of states and societies, the military has been relatively ignored in the study of civic participation. Of course, de Tocqueville is a notable exception as he worried about the effects of war on civil society. However, according to Theda Skocpol, this interest was not carried forward in the early classics on civic participation. For example, Skocpol, et al., note that in Almond and Verba's classic study *The Civic Culture*, "the effects of war on civic engagement were not explored" (Skocpol et al., 2002, 138-139).

This paucity of emphasis on the possible link between the military and civic participation has carried over into the current period of study on social capital. Skocpol argues that this is because most scholars of civil society "rely on an institutional displacement understanding of the relationship between state activity and voluntarism" (Skocpol et al, 2002, 139). What has been done is either centered around the political participation studies referenced above (and below) or on political opinions/attitudes (for examples of the latter, see Klinger and Chatagnier, 2013; Feaver and Gelpi, 2004; Feaver and Kohn, eds., 2001; Janowitz and Wesbrook, 1983; Jennings and Markus, 1977; and Schreiber, 1979). However, some studies that have looked at the broader link. Yet most of these focus on the connection between the war in general – in particular the energy, spirit, and needs sparked by war and the institutions developed to handle them – and civic participation rather than the relationship between wartime service itself and future civic engagement (see Kage 2010). Indeed, what Modell and Haggerty noted nearly three decades ago still largely holds, "little has been done to assess what kind of difference it makes to the individual in his civilian capacity, or to the society of which he is a member, when he is a veteran" (Modell and Haggerty, 1991, 220-221).

In these few studies, there is a strong sense that wars do increase overall civic participation but not necessarily the participation of veterans. Skocpol, for example, argues that “U.S. wars have promoted civic vitality. In a nation whose citizens are famous for their proclivity to organize and join voluntary endeavors, outbreaks of martial conflict have sparked voluntarist upsurges that repeatedly carried over into postwar eras” (Skocpol, 2002, 537). Indeed, “Big wars have been surprisingly good for American civic voluntarism. The Civil War and the twentieth-century world wars spurred the creation of new associations and buoyed the fortunes of preexisting groups willing and able to join victorious wartime mobilizations” (Skocpol, Munson, Karch, and Camp, 2002, 134). Putnam seconds this view, noting that from his study of the matter, “membership in civic associations has spurted after both major wars in the twentieth century, and political scientist Theda Skocpol has extended this argument to the whole of American history” (Putnam, 2000, 267).

Skocpol and Putnam, however, do not link military service itself with the increased civic engagement that they find war has occasioned. Unsurprisingly, Skocpol, the architect of the “bringing the state back in” movement in political science makes an “institutional synergy” argument for why participation spikes during and following wars (see Skocpol et al., 2002). Putnam, on the other hand, holds that war causes “patriotism and collective solidarity” or “shared adversity” which in turn translates into increased civic participation (see Putnam, 2000, 54 and 270). Moreover, he dismisses the argument that military veterans might be part of the reason for post-war associational enthusiasm. To the contrary, he argues, “Veterans are *not* more engaged civically than other men of their generation. The enduring effects of World War II on the civic habits of those who lived through it were not limited to the battlefield. Or perhaps the brutalizing effects of combat counterbalanced its communitarian effects” (Putnam, 2000, 485, FN 41). Other critics have echoed Putnam’s conclusion. Ronald Krebs in reviewing these works notes that they “have concluded that military service, even during wartime, has left veterans politically unmoved or even alienated” (Krebs, 2004, 112 and 118-119). Given this prominent research, an appropriate null hypothesis for this study is that military service has no impact on civic participation.

There are a few studies, however, that find military service to have a positive influence on civic participation, though they differ markedly in theoretical approach and method. A very important paper is Suzanne Mettler’s work on the G.I. Bill (Mettler, 2002; Mettler, 2005). She

finds that veteran status does matter *but only indirectly* through access to the G.I. Bill educational benefits. According to Mettler, educational benefits to soldiers created two pathways to civic participation for veterans. The first of these she calls “civic predisposition.” Mettler argues that the GI Bill cultivated a civic predisposition by causing a desire for reciprocity among those who used it (as they felt a need to give something back to society). In comparing those veterans that participate (civically and politically) versus veterans that do not, Mettler finds that veteran civic engagement was highly influenced by whether or not they used the GI Bill for education.

The second pathway identified by Mettler is that education raises “civic capacity,” and, because of the GI Bill, veterans were more likely to attend college than non-veterans, holding other factors constant. Surely education produces human capital that may be exploited in a variety of civic endeavors, and it also increases financial and social resources. The combination of civic capacity and civic predisposition will combine, in theory, to increase civic participation. This positive effect of education is supported by abundant empirical research. Putnam claims that education is “the strongest correlate that I have discovered of civic engagement in all its forms,” a claim confirmed by multiple researchers (Putnam, 1995, 667; Brehm and Rahn, 1997; Hall, 1999; Leal, 1999; Putnam, 2000; Brewer, 2003; and Glaeser, Laibson, and Sacerdote, 2002).

A significant weakness of Mettler’s work is that her data includes only veterans. Without a comparable group of non-veterans, she cannot assess the impact of military service *itself* on civic participation. Our view is that military service, like education, can create both civic capacity and civic pre-disposition. Thus, we hypothesize that *both* education and military service will be associated with higher civic participation, and we explore whether the positive correlation between military service and civic participation is robust to the inclusion of educational background. This is especially important given recent work that has called into question the conventional wisdom on the strong relationship between education and the narrower but important dimension of engagement, political participation. An example of this is Berinsky and Lenz (2011: 358), where the authors find that “education itself has little reliable causal effect on voter turnout” while veteran status is negatively related to turnout.⁴ But despite research like

⁴ On the veteran finding, it is not clear that veteran choices about political participation such as voting would necessarily be similar to their choices about non-political civic engagement. There could be reasons to suspect that

this, it remains unresolved whether one side or the other has the upper hand. In his detailed survey of this newer literature, Persson (2015: 699) concludes that these works provide “a frustrating, divided picture and we are left without a clear answer as to whether education causes political participation.” Moving away from the education pathway and back to the basic issue of veteran engagement, the Veterans Civic Health Index – produced recently in both 2015 and 2016 – found that veterans are more civically engaged than their non-veteran peers (Tivald, 2016). Using survey data from the 2014 Census Current Population Survey, Volunteering Supplement and Voting Supplement, the most recent edition of the Index (2016) concluded that “For the second consecutive year, the data reveal that veterans are more likely than non-veterans to vote, contact public officials, volunteer, give to charity, work with neighbors to fix problems in the community, and attend public meetings” (Tivald, 2016: 4).

An important empirical innovation in studying the impact of military service in the Vietnam conflict has been the effort to use draft registration numbers (determined by a lottery based on day of birth) as an instrumental variable for military service in Vietnam. This approach provides a powerful solution to the central empirical challenge in studying civic participation and military service, which is the potential endogeneity of military service. It might well be that the same unobserved forces that motivate participation in civic groups also motivates people to sign up for military service. If this disposition is not fully explainable by family background variables then it might result in inconsistent estimators in the equation of interest. Angrist (1989) pioneered the use of draft lottery numbers to estimate the effects of military service on civilian labor market outcomes, and, then, lifetime earnings (1990). In 2011, Angrist and Chen (2011) used draft numbers again to find that the GI Bill was effective in raising the educational attainment of Vietnam veterans.

The studies by Angrist and colleagues were concerned with economic outcomes. Johnson and Dawes (2016) used the same IV strategy developed by Angrist to study civic/political outcomes. Their paper looks at the effect of military service on the civic participation of the *children* of draft-eligible men, thus taking an inter-generational approach to the question of social capital accumulation. Their measure of participation includes answers to the survey questions: “I volunteer my time for community or public service activities;” “I

veterans of some wars such as Vietnam could be alienated from politics and the political sector due to their experiences but yet positively inclined towards other forms of community engagement.

regularly contribute to charitable causes;” and “I vote in national or state elections.” These measures reflect both participation in civic associations and politics, leading the authors to refer to the outcome variable as “public participation.” They find that service in Vietnam reduces the public participation of the veterans’ children. In another paper using basically the same method, Johnson, *et al.* (2018) find that these same children of Vietnam veterans were more likely to enlist in military service.

Closely related to the topic of civic participation is volunteering. Nesbit and Reingold (2011: 67) conclude that military service “helps overcome barriers to volunteering by socializing people with civic responsibility norms, by providing social resources and skills that compensate for lack of personal resources, and by making veterans aware of opportunities to volunteer as well as asking them to do so.” They also find that the effect of military service on volunteering is greater for blacks and Hispanics, married veterans, and veterans who served during wartime.

The studies we discussed above are seeking to understand long-term processes, yet they do so with cross-sectional data. This is inherently an ambitious—perhaps overly ambitious—undertaking. A new study by scholars uses a massive data collection on Union Army veterans from the *Early Indicators* project,⁵ which is a random, longitudinal sample of administrative data gathered by the War Department, the Pension Bureau, and the Census Bureau that follows Union Army recruits over their lives—from childhood to death. Recent research by Costa, et al. (2018) documents that, decades after the war, Union Army veterans who had relocated to new places were much more likely to be living near members of their wartime company than they were other war veterans *or even family members*. This study powerfully illustrates that the social bonds formed during service were so strong that they shaped key life decisions of the veterans many years after the Civil War ended. This study is about social capital and does not speak to civic engagement, *per se*, but it is unique in following a large number of veterans longitudinally, rather than taking a current sample and asking about previous wartime experience or civic participation that occurred years before.

This tendency for former Union Army soldiers to co-locate and cluster together throughout their lives was likely facilitated by a very prominent civic association, the GAR (Grand Army of the Republic), which was a fraternal organization of veterans of the Northern forces following the Civil War. Hundreds of GAR posts developed across the country, and

⁵ See Costa, et al. (2017) and Hess (2017) for introductions to the *Early Indicators* dataset.

membership climbed to nearly half a million veterans. Furthermore, the GAR was one of the first and one of the most powerful advocacy organizations in American history, supporting Republican candidates for office, and advocating for a variety of causes, especially better disability pensions for veterans. Similarly, today a plethora of public and private organizations serve the social needs of veterans. In other words, there is a ready-made infrastructure for veterans to participate in civic life for the remainder of their lives. Our findings presented in the next section show that veterans groups still have a strong appeal, especially for combat veterans, who participate in these groups at a significantly higher rate than non-combat veterans.

2.2. Political Participation

The question of what motivates political participation (including all the different ways people can engage politically) is related to, though distinct from, the question of why people engage civically. Yet this literature may illuminate certain aspects of the civic participation question and is therefore worth discussing briefly. Unfortunately, Christopher Ellison is correct when he notes (and David Leal confirms), “In sum, there is little solid evidence regarding the effects of military service and/or combat experience on subsequent conventional political participation in the general population” (Ellison, 1992: 364; and see Leal, 1999: 155).

Two of the most prominent studies that have examined this link have focused on black and Latino veteran political participation. Leal focuses on Latino veterans and concludes that the “the null hypothesis, that military experience is unconnected to civic involvement, is clearly incorrect” – at least for this group (Leal, 1999:170). Instead, he finds that “Latino veterans, and particularly draftees, exhibited higher levels of voting and low-intensity nonelectoral political activities. Anglo veterans did not increase their participation to the same extent” (153). Ellison also finds military service to be an important variable. In his study of black veterans, he concludes that “In general, military background variables [of blacks] are unrelated to low-initiative political activity but are strong predictors of high-initiative political involvement” (Ellison, 1992: 369). Duration of service, however, was found to have little effect, though it does reduce the likelihood of voting in state/local elections (371). One of his most important findings is that combat matters in terms of political participation. This will be discussed at more length below.

The most important studies of general veteran political participation are Kent Jennings and Gregory Markus's examination of Vietnam veterans attitudes and political participation, and Jeremy Teigen's work on veteran voting. Unlike the previously discussed articles, these studies do not focus solely on blacks or Latinos. Jennings and Markus (1976) find that generalizations are difficult to make given the variation among different groups in the sample. However, their data lead them to argue that "With the possible exception of general political interest, military service per se makes for scant differences in the 1973 profiles of our 1965 high school senior cohort" (Jennings and Markus, 1976). In other words, military service had little quantifiable effect on political attitudes and participation (Jennings and Markus 1976, 1977). Teigen finds that nearly all veterans in his sample participate at significantly higher levels than "similarly aged" non-veterans. However, the big exception is Vietnam veterans who "exhibit statistically lower rates of political participation than nonveteran men of their generation" (Teigan, 2006: 604; Berinsky and Lenz, 2011). This last point challenges the findings of Jennings and Markus' focused study of Vietnam veterans. And in a more recent study by Leal and Tiegen (2018), military service is found to increase the likelihood of later life voting. This was especially the case for "those with low levels of formal education and in midterm election years," suggesting that the pathway for this is an increase in "civic skills" conveyed through military experience (107).

2.3. The Role of Combat

Of course, if those who find that military service has an impact on political participation are right, it would be instructive to know why and how it translates into increased political participation. Leal (1999) argues that one possibility is that "The military . . . may be a training ground for many of the same politically relevant skills that Verba et al (1995) found can be learned in churches and the workplace." However, he rules this out because he found differential rates in political participation for draftees and volunteers (170). In fact, he speculates that the difference could be attributed to combat. Ellison provides more thoroughgoing speculation, suggesting several possible reasons why military service and/or combat might matter.⁶ We believe his ideas are highly relevant to the question of civic, not just political, participation:

⁶ Leal also speculates that the difference in participation between draftees and volunteers could be related to combat (Leal, 1999).

1. “The experience of combat duty, and to a lesser extent basic military training, may strengthen collective commitment among individual veterans, instilling a sense of responsibility for (a) contributing to the welfare of others and (b) assuming undesirable but necessary tasks”;
2. “Combat veterans and other military veterans may be viewed as leaders within the black community, and may be accorded particular respect because of their past sacrifices and accomplishments”;
3. “The successful completion of military service, and particularly combat survival, may foster or accentuate certain personality traits conducive to high-initiative political involvement: self-confidence, persistence, self-discipline, and pragmatic problem-solving orientations”;
4. “For black soldiers, military life may confer more specific attitudes” plus “may leave black veterans better prepared than their nonveteran counterparts to deal with government agencies and other bureaucratic institutions” (Ellison, 1992: 373).

We do not undertake the racial analysis that Ellison focuses on, but we find that his comments about military training and, especially, combat experience, suggest that we should find significant effects of military service on civic participation in later life.

It may be that combat causes individuals to become alienated from their communities. However, one could argue that combat increases one’s willingness to trust others since people learn under fire to trust fellow soldiers and depend on them. This is one way combat could help build social capital. However, and more relevant to the work here, social capital could be created by increased civic participation since military life, especially combat, may induce a feeling of collective responsibility and larger sense of social solidarity (see Wilson, 2007), that increases associational participation. In contrast, society at large has “hunkered down” in a diverse world where many elements have reduced the scope of one’s feelings as far as social solidarity is concerned (Putnam, 2007; Wilson, 2007). Moreover, combat itself may work to radically increase feelings of social responsibility à la Durkheim. Fire, here, forges a particular bond between the combat veteran and the community for which he puts himself into danger.

The emerging literature on traumatic experiences related to civil war and violence and their relationship to social cohesion and political participation is also relevant to the question of whether and how combat experience might impact engagement – political or otherwise. Scholars

have recently found that traumatic experiences in these conflicts correlate with greater political participation and/or civic engagement rather than with isolation or alienation. As one meta-analysis noted, “In case after case, people exposed to war violence go on to behave more cooperatively and altruistically, which we will generally call ‘prosocial’ behavior. . . . People exposed to more war-related violence tend to increase their social participation by joining more local social and civic groups or taking on more leadership roles in their community” (Bauer et al 2016: 250). This tracks with the work of those scholars who posit the existence of “posttraumatic growth” (the “positive psychological change experienced as a result of the struggle with highly challenging life circumstances”) such as Tedeschi and Calhoun (2004; 1996). For example, Blattman (2009), in his study of ex-combatants in Uganda, finds that abduction for combatant recruitment and the follow-on exposure to violence these individuals faced increased political participation in terms of voting, community leadership, and political work. Indeed, he finds that those “who witnessed the most acts of violence are the most likely to participate politically later in life” (238). Importantly, Blattman does not find a similar impact on broader non-political participation. He suggests that the cause of increased political participation is not skill accumulation, lower opportunity costs, or a change in preferences for altruism but “personal transformation” growing out of the traumatic experiences (232). Bellows and Miguel (2009), in their study of Sierra Leone, find that those who directly experience wartime violence are more politically engaged than those who did not suffer such experiences. But unlike Blattman, they find that the former group is also more civically engaged. Bellows and Miguel postulate that these impacts of violence are due to “changes in individual preferences and values. On average experience with war violence mobilizes people and turns them into community activists, rather than demoralizing them” (1156). Similarly, Gilligan et al (2014) find that experience with wartime violence in Nepal’s civil war led to increased voting and community activity as less social individuals exited communities while those who remained coped through increased social cohesion.

These findings, though, have not been universally supported in the literature. DeLuca and Verpoorten (2015: 115) find in their study of Uganda that the civil war did not positively impact “formal electoral participation.” They suggest that this could be due to a decline in “the willingness to vote, perhaps because of a loss of faith of citizens in the functioning of their country’s formal institutions” (116). However, they did find that civil war exposure increased

discussion of politics and attendance at public meetings, possibly due to local needs in the post-conflict environment (138). Likewise, in their examination of post-civil war Tajikistan, Cassar, Grosjean, and Whitt (2013:286) find that exposure to violence reduced trust in local communities. But this experience was “significantly and positively associated with group participation” (311) – though not the kind of civic engagement these authors consider supportive of “efficient, impersonal markets” (314).

2.4. Hypotheses

In the literature discussed above, three important explanatory variables have come to the forefront: military service, combat experience, and education. Since combat experience occurs among a subset of those with military service, we start with the following two null hypotheses:

H1₀: Military service has no impact on a veteran’s civic participation later in life.

H2₀: Education has no effect on civic participation

In our view, compelling reasons exist to doubt these null claims. As noted above, abundant research has demonstrated a strong association between education and civic participation. Our view is that the arguments for why military service may have an independent effect on civic participation are quite similar to those related to education.

We begin by building on Mettler’s notion of “civic capacity,” which can induce civic participation in at least three ways. First, both education and the military provide marketable skills that increase the economic resources available to veterans. These resources can be used to increase civic activity. However, an offsetting effect is that higher earning capacity increases the opportunity costs of time, which induces the individual to shift time use away from volunteer activities and towards paid ones. Thus, the net effect of marketable skills is ambiguous, though the existing evidence related to education suggests that the positive effect of economic resources on participation is greater in magnitude than the negative effect of higher time cost. The impact of other economic resources related to military service, such as military pensions or health care, are not ambiguous because they do not raise the opportunity cost of time

Second, both college education and military service can increase civic capacity through the expansion of social networks. Both endeavors commonly place young people in a highly social environment where they interact with a large number of people in both formal and informal ways. It would be interesting to explore how the networking process is different for soldiers and students, but certainly both these experiences create a potential for young people to emerge from them with a variety of social bonds they did not have before. The research of Costa et al (2018) cited above, for instance, demonstrated with longitudinal data that military-based networks shape residential patterns for decades to come.

Third, both college and the military teach civic skills. Almost all military assignments involve working closely together in a team. Success at teamwork requires, among other things, communication, patience, the ability to see the needs and capacities of team members, and a measure of self-sacrifice. Furthermore, working as a team to accomplish specific goals creates opportunities both to lead and to follow. Veterans, as Johnson (2015) has noted, also develop competencies working in public service bureaucracies that could transfer over to non-governmental organizations with similar structures and community-servicing (and directed) missions. It would hardly be surprising if veterans seek out civic associations in which they can utilize the skills they have developed. In economic terms, when people become more efficient at producing civic goods, we expect to see more of them produced.

Mettler's second pathway to greater civic participation is "civic predisposition." According to Mettler, this came about primarily through creating a desire among the G.I. Bill for veterans to reciprocate for the support they received. But we expect that military service has a more direct and more potent effect on civic participation. Soldiers are taught on a daily basis about the importance of fulfilling their assigned mission and about prioritizing that mission over their personal needs and desires. Concepts of duty and honor permeate military life, and sayings like the U.S. Navy's prioritization, in order, of "ship, shipmate, and self" are ubiquitous. Indeed, self-sacrifice in the service of fellow unit members and in the service of the nation are regarded among the highest virtues.⁷ We suppose that not all of this regular indoctrination sinks in, but

⁷ For example, the U.S. Navy's core values are honor, courage, and commitment, with key components being things like willingness to "Fulfill my legal and ethical responsibilities in my public and personal life," to "Make decisions and act in the best interest of the Department of the Navy and the nation, without regard to personal consequences," and "The day-to-day duty of every man and woman in the Department of the Navy is to join together as a team to improve the quality of our work, our people and ourselves." See Department of the Navy Core Values Charter, <https://www.secnav.navy.mil/Ethics/Pages/corevaluescharter.aspx>.

even if soldiers take only a small measure of it into their post-military lives, we would expect from them a higher level of civic participation. We also anticipate that veterans will have higher civic engagement because they have ready-made veteran organizations (such as the American Legion and the Veterans of Foreign Wars) in which they can participate. Given the high degree of sociality of military service, we expect that veterans are disposed to participate in veteran groups because of the camaraderie and bonds veterans feel towards their fellow soldiers. Again, not all veterans will feel this camaraderie, but surely some will. The relative ease of finding fellow veterans makes this avenue of participation likely.

Unfortunately, data are not available that can establish the causal pathways we have hypothesized above. However, the ideas just discussed all point to a simple hypothesis we can test, though our evidence will be correlational, not causal:

H1_a: Veterans will have greater civic participation than non-veterans,

2.4.1. Education

As noted above, despite some recent challenges to the conventional wisdom, a large body of previous research suggests a strong effect of education on civic participation. We seek to confirm that finding and, more importantly, to see whether the relationship between military service and civic participation (found in H1_a) is modified by the inclusion of education. We anticipate that education benefits associated with military service will be responsible for part of the reason military service is positively correlated with civic participation, but, as discussed above, military service should create civic skills and a civic predisposition that is not a function of education. Specifically, we seek evidence for the following two hypotheses.

H2_a: Education will have a positive effect on civic participation.

H2_b: The effect of military service (H1_a) will be modified—but only partially—by education.

H2_a is confirmed if the education coefficients in the regression analysis are positive. *H2_b* is confirmed if the military service coefficients are positive and significant when education is added to the regression equation.

2.4.2. Combat

Military service takes a variety of forms. One very simple way of differentiating types of service is to identify which veterans faced combat and which did not. Because combat is an emotionally intense experience, it should magnify some of the reasons that veterans participate in civic life. We expect that combat is unlikely to increase civic capacity, but it may increase civic predisposition significantly. In particular, we anticipate that the emotional bonds to other veterans will be stronger for combat veterans than non-combat veterans. Moreover, there is some evidence that the motivation to serve the community is increased by deployment to war zones, especially in terms of “the more abstract motivation to serve society as a whole, commitment to the public interest” (Braender and Andersen 2013). This increased motivation has obvious implications for post-service veteran perspectives on civic participation. It also tracks with the literature on civil wars in which exposure to violence led to “post-traumatic growth” (Tedeschi and Calhoun 2004; 1996; Blattman 2009), shifts in values towards political and communal goods, and greater social cohesion. A mitigating force, however, is that some combat veterans who suffer from PTSD or other emotional consequences of their service may withdraw more socially and be less inclined towards civic participation (though Blattman’s [2009: 237] findings about abductees exposed to violence in Uganda suggest that this view of “damaged” veterans might be overstated). In sum, the literature discussed above suggests the following hypothesis:

H3: Combat veterans will participate at a higher level than non-combat veterans, especially with respect to veteran groups..

We now turn to a discussion of the empirical methods used to test these hypotheses.

3. Data and Methods

The question at hand is a demanding one in terms of data requirements and appropriate estimation methods. We are trying to capture the long-term effect of military service on civic participation later in life. Ideally, we would follow recruits over the course of their entire lives,

but there are no prospective datasets that follow veterans and non-veterans for a sufficiently long period of time; thus, cross-sectional data or short panel studies are the only option. Several national datasets provide potential solutions, but each have their weaknesses. We need a dataset that gives sufficient information on both civic participation and military service.

3.1. The NSFH Dataset

The NSFH (National Survey of Families and Households) is a national random sample of the non-institutionalized adult (19 years of age or older or married) population in the contiguous United States. We use wave I of the survey, which was conducted from March 1987 through May 1988. During this period, one adult in each household was randomly selected as the primary respondent for a total of 13,008 subjects. We restrict the sample to men aged 30-69 at the time of their interview and delete observations with missing data. This provides, after deleting cases with incomplete data, a sample of 2,185 men.⁸

3.1.1: Dependent Variables

One very attractive feature of the NSFH is that the questions on civic participation are modeled closely after the data found in the GSS (General Social Survey), which are the foundation of the analysis carried out in Putnam (2000). Respondents are asked the question, “Here is a list of various kinds of organizations. How often, if at all, do you participate in each type of organization?” Note that the respondents are prompted to give their participation in a “group or organization.” This is important because it captures formal rather than informal participation. Participation in these activities outside of an organized group is not captured in this variable. Also, there is no additional information provided to respondents, so we are left to speculate how respondents subjectively define each type of group.

In the analysis to follow we employ three different measures of civic participation, all of which are derived from the question noted above. The first measure, “Any Participation,” is a dichotomous variable indicating whether the respondent participates at all in any of the 15 type of organizations. Roughly three-fourths of the sample participates in at least one type of group. The second measure, “Total Organizations,” captures the *number* of organizational types the

⁸ The NSFH also includes extensive information on the spouses of primary respondents. Unfortunately, the civic participation questions were asked only of primary respondents, not spouses.

respondents participate in. Therefore, we consider this measure as index of *diversity* in participation. Finally, the third measure is “Total Participation Frequency,” which calculated by creating a sum over all 15 groups based on points assigned as follows:

- 0: Never
- 1: Several times a year
- 2: About once a month
- 3: About once a week
- 4: Several times a week

This final variable we consider to be an index of *intensity*. Diversity and intensity measure distinct aspects of the participation decision, but we anticipate (and confirm empirically) that they are positively correlated with each other.

3.1.2: Independent Variables

Our primary focus is on the impact of military service on civic participation later in life. Those survey respondents who were veterans were asked if they were ever in combat during their service, though we do not know the time, length, or intensity of combat. From this information we create our three military service categories: 1) non-veterans; 2) non-combat veterans; 3) combat veterans. We presume that self-reported combat includes a wide range of intensity and length of service ranging from merely traveling briefly through a combat arena to lengthy, intensive involvement in battle. We suspect that combining these different levels of experience into one combat variable likely attenuates the estimated effect of combat significantly.

In 1987-88, many of the men in this sample were young adults in World War Two (WW2), so we have good representation of men from WW2, the Korean War and the Vietnam War. For some of the analysis that follows, we sub-divide the sample by age group: 30-44 (Vietnam Era); 45-54 (Korean Era), and 55-69 (WW2 Era). Again, these are age cohorts, not service cohorts, but they correspond broadly with the three significant conflicts.

We include several important socioeconomic and demographic control variables that are focused on simple demographics as well as family background variables from childhood. This is fortunate since in many studies little is known about the individual’s childhood. Childhood variables may have a strong influence on human capital attainment. We have the following background measures: whether the respondent was ever on public assistance as a child; the

socioeconomic status of the father's occupation (a continuous measure calculated by NSFH researchers); whether the respondent's mother worked outside of the home; whether the family had a religious affiliation; and the educational attainment of the respondent's father and mother.

These control variables are a good representation of the hypothesized determinants of civic participation. The empirical literature shows that age is strongly associated with civic participation, with participation rising with age until it reaches its maximum in the late thirties to early forties and then steadily declines (see Putnam, 1995; Glaeser et al., 2002). Race has also been shown as a predictor of civic participation. Putnam asserts that at least until the 1980s, blacks belonged to more associations on average than whites, partially due to their membership in religious and ethnic organizations (Putnam, 1995). People who consider themselves active members of a religion also generally demonstrate higher levels of civic participation (obviously due in large part to their participation in church-affiliated groups). The current research does not provide evidence showing any particular religion promoting more civic participation than others, thus we limit our religion measure to a dummy variable of whether the respondent professed affiliation with any religion as a child.

Finally, because education plays such a prominent role in the existing literature on civic participation, we conduct a robustness check of our results by estimating the model with and without education, thereby providing a test of hypotheses H2_a and H2_b. Though some researchers have disagreed over whether the income effect or substitution effect is greater when determining the impact of education and income on civic participation, most studies show that both income and education are associated with higher levels of civic participation (Putnam, 1995: 667; Brehm and Rahn, 1997; Hall, 1999; Leal, 1999; Putnam, 2000; Brewer, 2003; and Glaeser, et al., 2002). We do not, however, include income or other contemporaneous controls in the analysis because we restrict our analysis to early life predictors of civic participation that can plausibly assumed to be exogenous.

3.1.3. Descriptive Statistics

Table 1 gives the percent of the sample that participates at all in each of the 15 groups, broken out by veteran status.⁹ We see from the descriptive statistics in that table the first inklings of our primary empirical conclusions, namely that veterans participate at higher rates

⁹ The GSS contains one additional group type: "other." This type is not included in the NSFH.

than non-veterans. The type of participation most strongly associated with military service is, not surprisingly, participation in veteran groups, particularly among combat veterans. We also find higher participation among veterans in fraternal groups, service organizations, unions, and college fraternities. Broadly speaking, two salient dimensions seem to be associated with this list of groups: 1) service and 2) fraternity. The groups that, in particular, do not seem to appeal to veterans are political, hobby/garden, farm, literature, professional/academic, and church.

--Table 1 here--

Another notable statistic in Table 1 is that veterans are somewhat less active than non-veterans in political groups. In Mettler's model, civic participation is, at least in part, a feedback effect of state action (in this case, the GI Bill). Furthermore, she argues that one principle reason that veterans participate in civic associations is that they feel indebted to the government. If Mettler's claims are true, it would, indeed, be surprising that veterans are less interested in politics, as we find. However, Mettler's analysis is seriously constrained because she looks only at veterans, rather than comparing veterans with non-veterans, as we do.

Important differences in demographics exist across the veteran status groups. Because of the large number of WWII era men who served, the veterans (especially combat veterans) are a lot older than veterans. Veterans are also more likely to be white, and they have less education. Their parents also have lower levels of education than the parents of their non-veteran peers. We cannot determine here whether the lower levels of education among veterans are related to their military service or whether they simply reflect lower levels of college attendance in the older cohorts.

3.2. Estimation Issues

3.2.1. Parameter Identification

Our basic estimation strategy is straightforward: to apply ordinary least squares (OLS) regression to each of the three measures of the dependent variable discussed above using military service as the primary independent variable and the other independent variables discussed above as controls. Consistent estimation of the OLS model requires that the independent variables are exogenous (uncorrelated with the error term), but it is plausible that military service violates the

exogeneity assumption because there may be something unobserved in the data (say, some sort of propensity to participate) that motivates both military service and civic participation in later life. A few researchers (Angrist, 1989; Angrist and Chen, 2011; Johnson et al., 2018) have used Vietnam draft lottery numbers as instrumental variables for military service in other studies related to veterans, but those data do not have the detail on civic participation that we seek.¹⁰

In an all-volunteer military, the potential that military service is an endogenous variable is very high. Therefore, our approach is to go back in time a little and concentrate on the mid-twentieth century data in which the major conflicts (WWII, Korea, Vietnam) were dominated by the presence of the draft rather than looking at veterans of more recent conflicts that took place in the era of the All-Volunteer Force (AVF). During wartime, there were many young men who enlisted voluntarily in the service, but many of those enlisted because they knew they would soon be drafted and they wanted more flexibility in determining the terms of their service. In other words, most of the recruits were induced into service through exogenous factors—namely, war. We do not know how many enlisted because of the draft, but our principle empirical assumption is that the presence of the draft mitigates significantly the potential endogeneity of military service. This assumption is well-grounded given the findings of Shields (1980: 139, 145) showing, based on a national sample, that for both white and black Americans, “draft pressure” impacted enlistment decisions during the Vietnam War (with whites motivated more strongly). Angrist (1991) provides additional support for this assumption – again, at least for the Vietnam War. His examination of administration records found that men with low draft lottery numbers (namely, those at higher risk of being conscripted) “are overrepresented among men who voluntarily enlisted in the military,” though the impact of draft pressure was stronger among whites.

To summarize formally the model described above, consider the following specification. We assume an exogenous vector of early-life characteristics, X , and a vector of military service variables, M , and we estimate the following equation of interest:

$$P = X\alpha_l + M\beta_l + u, \tag{1}$$

¹⁰ Furthermore, draft registration numbers are only relevant to the Vietnam conflict, and many of the veterans in our sample served in WWII and the Korean War. Draft lottery numbers also require knowledge of exact birthdays, which are not present in the public file for the NFSH.

where P represents civic participation, α_l and β_l are coefficient vectors, and u is an error term. Civic participation occurs at the time of the survey and both X and M are pre-determined variables. We measure M with the following three categories 1) non-veteran (the reference category); 2) non-combat veteran; 3) combat veteran. As noted above, we estimate equation (1) using three different measures for P .

We exclude variables such as income, health or family structure as explanatory variables because of their likely endogeneity, even though these variables may affect civic participation. Our regression model is best interpreted, therefore, as a reduced form equation, in which the endogenous variables are expressed as functions of the exogenous variables in the system. Using this approach, consistent estimates of the reduced forms can be estimated using simple OLS.

3.2.2. Education

The literature discussed above indicates that education may be a powerful determinant of civic participation; therefore, we seek to see if the military service coefficients from the reduced form estimates of equation (1) are robust to the inclusion of education. Since we are testing against the null hypothesis that military service has no effect, we are particularly concerned about erroneously rejecting the null through omitting a relevant variable in equation (1). Our estimating equation, therefore, is the following:

$$P = X \alpha_2 + M \beta_2 + E \gamma_2 + v. \quad (2)$$

where E is vector of education variables, γ_2 is a coefficient vector, and v is an error term. In our data, we measure education as a pair of dummy variables, with the first indicating whether the respondent attended some college but did not graduate and the second being whether the respondent graduated from college (with education equal to high school or less as the reference category).

Estimating equation (2) is problematic because E is likely to be correlated with both M and v . As just noted, we include E in equation (2) to avoid classic omitted-variable bias. But including E may also introduce post-treatment bias since P and E may share a common unobservable cause. Post-treatment bias is an experimentalist concept, but the issue is relevant

for observational work when data is generated over time.¹¹ Adopting the experimentalist’s language for a moment, if we think of M as an exogenous treatment variable and E as a “post-treatment” variable that is determined, in part, by M , then β_2 from equation 2 does not represent the full treatment effect because part of the effect may be absorbed into γ_2 . Post-treatment bias can be either negative or positive depending on assumptions made about the covariances in the model. Because military service creates incentives to obtain higher education and because the underlying (unobserved) disposition to civically participate is likely to positively affect M , E , and P , the coefficient β_2 from equation (2) is likely to be downward biased. Thus, based on these assumptions, our conjecture is that post-treatment bias works in the direction of strengthening our central empirical results about civic participation and military service.

Of course, the data at hand are not experimental and are observed in a cross section, meaning we cannot make causal statements about treatment effects. Furthermore, in some cases, education occurs before military service, not after, so our conjecture about the net direction of post-treatment bias may not hold. Despite these inherent limitations, we can use equation (2) to conduct a tentative test of hypotheses $H2_a$ and $H2_b$. As noted earlier, we expect that education will modify the military service estimate because of education benefits that come from the GI Bill, but we hypothesize that military service will still be independently associated with civic participation even when controlling for education.

3.2.3. *Robustness*

To strengthen our confidence in the estimates obtained from equation (1), we conduct two additional sensitivity analyses. First, it may be the case that the vector of military service coefficients β_1 varies across cohorts. For instance, perhaps the civic participation of Vietnam Era veterans differs from the participation of Korean War and WWII veterans. To test this, we estimate equation (1) separately by cohort and compare our results to the main coefficient estimates.

Second, Table 1 indicates that veteran groups are an important avenue of civic participation for veterans. Perhaps the estimates of β_1 are being driven primarily by participation in those groups rather than participation more generally. We thus estimate equation (1) where

¹¹ See Montgomery, Nyhan, and Torres (2018) for a recent and thorough treatment of post-treatment bias. In observational work, creating post-treatment bias is sometimes called “over-controlling.”

each of the three measures of participation are calculated ignoring veteran groups to see if this changes our estimates of β_1 .

3.2.3. Evaluation of hypotheses

If the null hypotheses discussed earlier all hold, then $\beta_1 = \beta_2 = \gamma_1 = \gamma_2 = 0$. If $H1_a$ is true (veterans participate at higher rates than non-veterans), then $\beta_1 > 0$. If $H2_a$ holds (education raises civic participation), then $\gamma_2 > 0$. If $H2_b$ holds (military service modified by education), then both $\beta_1 > 0$ and $\beta_2 > 0$ but $\beta_2 \leq \beta_1$. In the case where $\beta_1 = \beta_2 > 0$, then military service would have an effect on participation that is completely independent of education. Finally, $H3_a$ holds if, within the vector of β coefficients, the coefficient associated with combat veterans is greater than the coefficient associated with non-combat veterans.

4. Results

4.1. Main Reduced Form Estimates

Table 2 provides OLS estimates of Equation (1) for each of the three measures of participation. Given that *Any Organization* is a dichotomous variable, the OLS regression in this case is equivalent to a linear probability model, and the coefficient represents a change in the percentage of participation. In each case, p-values are based on heteroskedasticity-robust standard errors that employ sample weights provided by NSFH. For each participation measure, the first block of coefficients differentiates between non-veterans, non-combat veterans, and combat veterans.¹²

-- Table 2 Here --

For each of the three measures of participation, military service is associated with significantly higher levels of participation than non-veterans, and these values are highly

¹² For the sake of robustness, we also estimated the *Any Organization* equation using Probit and calculated the change in probability between the veterans and non-veterans. The Probit analysis reveals an estimated coefficients for non-combat and combat veterans that are almost identical to each other. Similarly, for the other participation measures we estimate Tobit models, which account for the significant left-censoring of the dependent variables at zero. The Tobit coefficients for military service are, again, almost identical to the OLS estimates. All the Probit and Tobit estimates can be seen in the Technical Appendix accompanying this manuscript.

significant ($p < .01$ in each case). When it comes to the simple participate/don't participate dichotomy, combat veterans are almost identical to non-combat veterans ($\beta \approx .07$). But when it comes to the diversity and intensity measures of participation, combat veterans participate more than non-combat veterans, though F-tests show that the difference is not statistically significant ($p = .33$ for diversity and $p = .38$ for intensity). In sum, both combat and non-combat veterans have a much higher civic participation rate for all three participation measures than non-veterans. Evidence exists that combat veterans are more diverse and (possibly) more intense than non-combat veterans, and both veteran groups are significantly more diverse and intense than non-veterans.

4.1.1. Demographics and Early-Life Variables

Our estimate of the age profile shows an early peak in the 35-39 age group, followed by a gradual decline—for all three measures of participation. The estimate on intensity is the greatest, which declines by 23% from its peak until the end of life. These declines are not as large as some of the estimated coefficients in the model, but they are notable because a prominent feature of work by Putnam is an increasing age profile well into old age (Putnam, 1995: 673; Glaeser, et al., 2002). Perhaps if we controlled for contemporaneous variables such as health or income, the age estimate would diminish. We explore further the interaction between age and military service in the next sub-section.

The impacts of race are fairly large in magnitude, but are not straightforward. Compared to whites, blacks are less likely to participate, but when they do, it is with more diversity and intensity (these estimates all have p-values slightly higher than .05, so they are not significant by traditional standards). But those with a racial designation of “other” participate significantly less than whites and blacks for all three participation measures. We suspect that these estimates only scratch the surface of racial differences in participation, a topic which certainly deserves additional research.

Early-life variables are included to capture the home environment in ways that may affect participation in later life. However, the estimates, in most cases, are neither large nor significant.¹³ Mother's and father's education are both positive, but the estimates are

¹³ Furthermore, dropping all the covariates in the model has little impact on the coefficient estimates on the military service variables.

comparatively tiny. Being on public assistance is negatively associated with later life participation, while the mother working outside the home is positively associated. The status of the father's occupation also has a significant positive effect, but the estimate is relatively small.¹⁴ In all these cases mentioned, greater economic opportunity in childhood corresponds with greater civic participation in adulthood, as our theory would suggest. But the early life variable with the most striking coefficient is religious affiliation. Those who grew up without any specific religious affiliation participate at much lower rates than other respondents in the sample. Indeed, the estimate of growing up without religion is roughly the same magnitude as having a college education (see estimates on education below).

4.2. The Role of Education

4.2.3. Education

Table 3 provides estimates of Equation (2), which includes both military and education regressors. As expected, the education coefficients are large and highly significant. Holding other covariates constant at mean levels, a college education (relative to a high school education) raises the probability of participation by 27 percentage points. Similarly, a college education raises the diversity index by 231% (from 1.42 to 3.28) and the intensity index by 237% (from 2.33 to 5.53). Furthermore, the confidence intervals around those estimates are relatively narrow. As noted above, these are not estimates of causal effects, but the associational evidence for hypothesis *H2a* is highly significant.

--Table 3 here --

Including education in the model reduces the magnitude of the military service coefficients, but only modestly, which is consistent with hypothesis *H2b*. Across all three participation measure, military service remains statistically significant at the 95% level, except for the case of non-combat veterans, where $p=.064$. Interestingly, the reduction in the coefficients on non-combat service are more pronounced than the reduction in the coefficients on combat service. This finding has a ready rationalization: the “civic training” one gets in college

¹⁴ A one-unit increase corresponds to less than one-half of a standard deviation, so even relatively large changes in SES have comparatively modest impacts on participation.

(teamwork, living at close quarters, participation in organized social and education events, knowledge of other peoples and cultures, etc.) would seem to overlap much more closely with non-combat military roles than with the combat role. Indeed, we cannot think of any characteristics of college life that are similar to military combat.

As noted above, our inferences about the role of education are associational and, therefore, tentative. Nonetheless, we have shown that our estimates are not highly sensitive to the addition of education variables. In other words, the association between military service and civic participation seems to operate independently from education, especially for combat veterans. Furthermore, the very large education coefficients suggest that education both widens and intensifies civic participation, consistent with the extensive research cited above.

4.3. Robustness Checks

4.3.1. Cohort Comparisons

Our next step is to sub-divide the sample by age cohort to see if the association between military service and civic participation holds across age groups—in other words, to test whether $H1_a$ holds for each period of service. Again, we cannot tell from cross-sectional data whether estimated differences between age groups are due to age, period, or cohort effects. Table 4 gives model-based predictions of participation for each participation measure based off estimates of equation (1) by age group (complete results are found in the Technical Appendix). Note that because of the reduced sample size (and corresponding drop in precision), we have collapsed veteran status into a simple dichotomous measure: veterans v. non-veterans. We also provide a statistical test of whether, based on Equation 1, the estimates for veterans and non-veterans are different from each other.

--Table 4 here--

For each measure and for each age group, the estimated participation of veterans is higher than for non-veterans. As seen in the final column, many of these differences are statistically significant, though sub-dividing the sample lowers precision of estimation. Interestingly, even though precision is lowered, the magnitude of the coefficients are relatively uniform across cohorts. The exception is the lower diversity and intensity of participation among WW2 vets

compared to the other age cohorts. We suspect that this reflects more of an aging effect than a cohort effect. But perhaps the most surprising feature of Table 3 is the relative sameness of the participation patterns across cohorts. Given the mythology surrounding the Greatest Generation, as well as popular perceptions of psychological damage done by the Vietnam War, this sameness is surprising. Indeed, this analysis shows that the general findings reported in Table 2 are not being driven by veterans from a particular conflict.

4.3.2. Veteran Groups

Table 1 showed how both veterans and non-veterans engage in participation, and in many cases veterans are not different from non-veterans. The most notable exception to this is the case of veteran groups. Obviously, veterans participate much more often in these groups than non-veterans, and combat veterans participate (27.0%) at a much higher rate than non-combat veterans (10.6%). A reasonable question to explore is whether the findings in Table 2 are being driven by participation in the veteran associations. We, therefore, estimate the models found in Table 2 but exclude the veteran group when we construct the three participation measures.

The results of this sensitivity analysis are displayed in Table 5. The estimates from Table 2 are given in the top block of rows, while the estimates excluding veteran groups are in the bottom block. In general, we see that civic participation is lower when we exclude veteran groups, but not profoundly so. The greater reduction in coefficient magnitude for the combat veterans is consistent with the much higher rate of participation in veteran groups by combat veterans, as shown in Table 1. In all cases, however, veterans' civic participation is higher than non-veterans.

--Table 5 here--

Table 5 represents a useful robustness check, but we argue that excluding veteran groups from the analysis would be a conceptual mistake for the same reason that we do not exclude college fraternities for college graduates, union groups for union workers, or professional groups for professionals. Previous life experiences shape the types of engagement people choose, and the existence of veteran groups provides a mechanism for veterans to engage civically. The large difference between combat and non-combat veterans with respect to participation in veteran

groups suggests the salience of combat in the lives of veterans for many years after the conflict has ended.

5. Conclusions

In contrast to Putnam and other skeptics, we find that veterans *are* more engaged civically than other men across all the major wars of the 20th century. The results in the previous section give us evidence which confirms that veterans participate more than non-veterans ($H1_a$); that education is positively associated with civic participation ($H2_a$); and that the association between military service and participation is largely independent of educational attainment, with coefficient values modified only slightly when education is included ($H2_b$). We also provide evidence that suggests positive military service coefficients are present across the different age cohorts in the sample.

We also find evidence of three other important patterns in the data. First, our estimates suggest support for the $H3_a$, that combat veterans participate more than non-combat veterans. The difference between combat and non-combat veterans are not generally statistically significant, but the overall pattern is interesting. Our theory suggests that combat functions as sort of a higher intensity military service, which makes eminent sense. This pattern holds at the aggregate for the three measures of participation that we use and for individual types of groups as well. Furthermore, our conjecture is that because a self-report of combat service likely includes a wide range of experiences, the true difference between non-combat and combat is likely to be higher than we estimate. Moreover, combat, in our model, has the opposite sign from what Putnam hypothesizes it did in World War II. This is consistent with Ellison's (1992: 372) conjectures about the particularly salient effects of combat, though we cannot identify whether the causal pathway is through deepening feelings of collective responsibility, something related to being seen as a leader in the community, or skill development. Moreover, our finding on Vietnam directly contradict part of Putnam's argument on Vietnam veterans where he notes that "Long-term research on veterans of these wars suggests that while Vietnam vets have been relatively isolated socially, even decades after the war, vets of the Second World War were more socially integrated" (Putnam, 2002, 272).¹⁵

¹⁵ It should be noted that Putnam's statement here seems to contradict what he said in the earlier quotation cited from page 485 of the same book.

The second pattern in the data comes from the results of Table 6, which compares the coefficient estimates from ordered probit regressions of participation in each of the 15 surveyed activities. We do not have a formal way to categorize the nature of each association type (nor do we necessarily understand how respondents understand difference between the groups), but our informal analysis suggests at least two important dimensions associated with increased participation by veterans: service and fraternity. Veterans seem motivated to be actively engaged in service and to spend time with their compatriots. And for those associations where the coefficients on veteran status are large and statistically significant, combat veterans tend to participate at a higher level than non-combat veterans in each case.

These conclusions depend, of course, on the accuracy of our assumptions. The most problematic assumption is that military service, for this type of analysis, can be treated as an exogenous variable because most of the veterans served in a period where they were subject to being drafted. If this assumption is not true, then it may be that what we are measuring are the effects of a disposition to participate that 1) is not determined by the measured early-life variables in the data and 2) influences both military service in young adulthood and civic participation later in life. Even if this were true, it is striking that military service is such a powerful proxy for the disposition to participate. That military service both appeals to those with such a disposition and, likely, reinforces that disposition is a highly interesting finding. Understanding it better would inform both how we structure our military service and whether other social institutions have important lessons to learn from the military.

The third pattern relates to Mettler's (2002) widely-cited argument that education funded through the GI Bill gave veterans both resources ("civic capacity") and a desire to "give back" to society ("civic predisposition") for the generous benefits they received. However, she did not allow for the possibility that service could be a driving variable itself that had long-term effects—-independent of the effects of education subsidies. Of course, consistent with the conventional wisdom in the research (with the caveat that this has been challenged in the recent literature as noted above), our estimates confirm that education has a strong positive association with civic participation. But importantly, we show that the coefficients on military service are largely independent of education (whether funded through the GI Bill or through other means). Though we do not consider our estimated models to be causal, our findings do suggest that the schoolhouse of war and military service played an important role that goes beyond education.

Scholarly research on civic engagement and the broader realm of social capital is vast, extensive, broad, and (oftentimes) confusing. If Putnam (and the broader literature on civic participation referenced above) is right about both the importance and decline in civic participation (and thus social capital as well), understanding the determinants of civic engagement should remain high on the research agenda of our discipline. In this essay, we have tried to add a measure of clarity to one aspect of the debate: the impact of military service. Among its multiplicity of effects, warfare shakes up the lives of individuals (particularly young men) and leads them to engage in an intense, traumatic, and sometimes inspiring set of actions that most of them would otherwise not choose. From a statistical standpoint this shake-up - or early “transforming influence” as Kelty and Segal (2013: 19) put it - is highly advantageous because we can then examine the lives of these young soldiers as they age and take on conventional life activities. Indeed, if the act of making war does not affect a person’s life, what would?

Strangely, leading scholars in the field have often largely ignored this question, assumed it away, or come up with alternative explanations for why veterans look different than non-veterans. An important exception comes from the literature on civil wars where several scholars have explored how exposure to violence during these conflicts has impacted political and civic engagement. Scholars looking at veterans of interstate wars would be well-served to take this issue as seriously as those looking at civil wars, given that our findings of significant positive relationship between military service and civic participation starkly contradict the conventional wisdom on military service and civic engagement. That this conventional wisdom stands on such a weak foundation of empirical evidence is reason for scholars to devote considerably more work to understanding how civic disruptions such as war will shape the type of society we have in the future. Given the number of young men and women currently returning from war each year, the need could hardly be more pressing.

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TABLE 1: Sample Means and Percentages, by Veteran Status

	Non-Veteran		Non-combat Veteran		Combat Veteran	
N=	1,617		778		456	
<u>Participation Rate, by Group</u>						
Fraternal	9.9%		14.7%		16.1%	
Service	10.7%		15.1%		15.7%	
Veterans	0.7%		10.6%		27.0%	
Political	9.4%		8.6%		8.2%	
Union	10.6%		13.6%		12.6%	
Sports	40.4%		40.4%		38.2%	
Youth	20.2%		22.4%		19.6%	
School	27.0%		27.5%		25.0%	
Hobby/Garden	17.4%		17.0%		14.9%	
College Fraternity	3.6%		5.3%		6.6%	
Nationality	4.6%		5.3%		4.6%	
Farm	4.6%		3.5%		4.3%	
Literature or Art	13.1%		13.4%		9.3%	
Professional/Academic	23.8%		23.3%		17.7%	
Church	36.3%		40.5%		40.5%	
Any Organization	73.5%		79.6%		77.1%	
Total Organizations	2.32	(2.29)	2.61	(2.42)	2.60	(2.49)
Total Participation Intensity	3.97	(4.41)	4.26	(4.31)	4.22	(4.45)
<u>Demographics</u>						
Age	41.45	(10.18)	48.90	(10.30)	53.94	(11.46)
Race: White	77.2%		89.1%		88.3%	
Race: Black	11.3%		7.0%		8.4%	
Race: Other	11.5%		3.9%		3.3%	
<u>Family Background</u>						
No religion	5.7%		5.1%		3.6%	
Public Assistance	7.3%		8.4%		12.2%	
Mother Worked	24.8%		24.7%		16.8%	
Family SES Index	0.31	(.20)	0.29	(.17)	0.28	(.17)
Mother's Education	10.40	(3.63)	10.18	(3.19)	9.69	(3.17)
Father's Education	10.02	(4.16)	9.51	(3.54)	8.90	(4.00)
<u>Education</u>						
High School	28.2%		36.9%		42.7%	
Some College	47.4%		36.5%		40.0%	
College	30.3%		26.6%		17.4%	

Notes: Standard deviations are in parentheses.

TABLE 2: Main Regression Results

Independent Variables	Any Participation			Dependent Variable:			Participation Frequency		
	Coef.	Std. Error		Coef.	Std. Error		Coef.	Std. Error	
<u><i>Veteran Status</i></u>									
Non-Veteran	(reference)			(reference)			(reference)		
Non-Combat Veteran	0.075	(.022)	***	0.410	(.124)	***	0.610	(.229)	***
Combat Veteran	0.070	(.028)	***	0.571	(.153)	***	0.864	(.274)	***
<u><i>Race</i></u>									
White	(reference)			(reference)			(reference)		
Black	-0.060	(.027)	**	0.165	(.160)		0.645	(.348)	*
Other	-0.183	(.041)	***	-0.479	(.187)	***	-0.796	(.323)	**
<u><i>Age Category</i></u>									
30-34	(reference)			(reference)			(reference)		
35-39	0.008	(.026)		0.360	(.144)	**	0.716	(.288)	**
40-44	-0.021	(.030)		0.330	(.169)	*	0.476	(.329)	
45-49	-0.049	(.035)		0.220	(.190)		-0.011	(.345)	
50-54	-0.060	(.039)		-0.043	(.219)		-0.349	(.440)	
55-59	-0.047	(.037)		-0.344	(.190)	*	-0.900	(.325)	***
60-64	-0.109	(.042)	**	-0.383	(.225)	*	-0.852	(.394)	**
65-69	-0.080	(.043)	*	-0.365	(.214)	*	-0.973	(.371)	***
<u><i>Early Life Variables</i></u>									
Not religiously active	-0.225	(.046)	***	-1.033	(.172)	***	-1.750	(.315)	***
SES of Father's Occupation	0.011	(.006)	*	0.090	(.037)	**	0.175	(.075)	**
Ever on Public Assistance	-0.057	(.036)		-0.282	(.170)		-0.551	(.286)	*
Mother Worked Outside Home	0.033	(.021)		0.168	(.130)		0.475	(.250)	*
Mother's Years of Schooling	0.005	(.004)		0.033	(.023)		0.069	(.042)	*
Father's Years of Schooling	0.007	(.004)	*	0.052	(.025)	**	0.050	(.050)	
Constant	0.641	(.045)	***	1.147	(.232)	***	2.161	(.437)	***
N	2,851			2,851			2,851		
R-Squared	0.072			0.077			0.067		

Notes: All standard errors are heteroskedasticity-robust. *: p<.1; **: p<.05; ***: p<.01

Table 3: Veteran Status and Education

	<i>Without Education</i>			<i>Including Education</i>		
<u><i>Dependent Variable 1: Any Organization</i></u>						
Independent Variables	<u>Coef.</u>	<u>Std. Error</u>		<u>Coef.</u>	<u>Std. Error</u>	
Non-Veteran	<i>(reference)</i>			<i>(reference)</i>		
Non-Combat Veteran	0.072	<i>(.020)</i>	***	0.056	<i>(.022)</i>	***
Combat Veteran	0.073	<i>(.026)</i>	***	0.063	<i>(.028)</i>	**
No college				<i>(reference)</i>		
Some college				0.156	<i>(.029)</i>	***
College graduate				0.271	<i>(.033)</i>	***
<u><i>Dependent Variable 2: Total Organizations (Diversity)</i></u>						
Independent Variables	<u>Coef.</u>	<u>Std. Error</u>		<u>Coef.</u>	<u>Std. Error</u>	
Non-Veteran	<i>(reference)</i>			<i>(reference)</i>		
Non-Combat Veteran	0.375	<i>(.020)</i>	***	0.293	<i>(.121)</i>	**
Combat Veteran	0.574	<i>(.153)</i>	***	0.539	<i>(.151)</i>	***
No college				<i>(reference)</i>		
Some college				0.989	<i>(.118)</i>	***
College graduate				1.867	<i>(.158)</i>	***
<u><i>Dependent Variable 3: Participation Frequency (Intensity)</i></u>						
Independent Variables	<u>Coef.</u>	<u>Std. Error</u>		<u>Coef.</u>	<u>Std. Error</u>	
Non-Veteran	<i>(reference)</i>			<i>(reference)</i>		
Non-Combat Veteran	0.610	<i>(.229)</i>	***	0.413	<i>(.223)</i>	*
Combat Veteran	0.864	<i>(.274)</i>	***	0.815	<i>(.270)</i>	***
No college				<i>(reference)</i>		
Some college				1.668	<i>(.213)</i>	***
College graduate				3.199	<i>(.308)</i>	***

Notes: N=2,815. All models include all the explanatory variables found in Table 2, though coefficient estimates are not shown above. Standard errors are heteroskedasticity-robust. *: p<.1 **: p<.05; ***: p<.01. Complete regression results can be found in the technical appendix.

Table 4: Civic Participation Measures, by Age Group

<u>Age Cohort</u>	<u>Measure</u>	<u>Non-Veteran</u>	<u>Veteran</u>	<u>Difference</u>	<u>p-value</u>	
Vietnam Era	Any Participation	77.2%	82.9%	5.8%	0.018	**
(Age 30-44)	Total Organizations (Diversity)	2.51	2.98	0.47	0.002	***
N=1,659	Participation Frequency (Intensity)	4.35	5.15	0.79	0.007	***
Korean Era	Any Participation	69.6%	78.1%	8.5%	0.061	*
(Age: 45-54)	Total Organizations (Diversity)	2.16	2.77	0.61	0.016	**
N=513	Participation Frequency (Intensity)	3.62	4.27	0.65	0.156	
WWII Era	Any Participation	64.2%	73.8%	9.6%	0.034	**
(Age: 55-69)	Total Organizations (Diversity)	1.85	2.09	0.24	0.211	
N=679	Participation Frequency (Intensity)	2.92	3.31	0.39	0.209	
All:	Any Participation	72.5%	79.8%	7.3%	0.000	***
N=2,851	Total Organizations (Diversity)	2.24	2.70	0.46	0.000	***
	Participation Frequency (Intensity)	3.77	4.47	0.70	0.001	***

Notes: Values in this table are based on the the model used in Table 2 estimated separately for each age bracket. The table shows predicted values of the dependent variable, with covariates held constant at their mean values. P-values are based on heteroskedasticity-robust standard errors, with *: <.1; **: <.05; ***: <.01. Complete regression results are found in the technical appendix.

TABLE 5: The Role of Veteran Groups

	Any Participation			Dependent Variable: Total Organizations (Diversity Index)			Participation Frequency (Intensity Index)		
With Veteran Groups									
<u>Veteran Status</u>	<u>Coef.</u>	<u>Std. Error</u>		<u>Coef.</u>	<u>Std. Error</u>		<u>Coef.</u>	<u>Std. Error</u>	
Non-Veteran	(reference)			(reference)			(reference)		
Non-Combat Veteran	0.075	(.022)	***	0.410	(.124)	***	0.610	(.229)	***
Combat Veteran	0.070	(.028)	**	0.571	(.153)	***	0.864	(.274)	***
Without Veteran Groups									
<u>Veteran Status</u>	<u>Coef.</u>	<u>Std. Error</u>		<u>Coef.</u>	<u>Std. Error</u>		<u>Coef.</u>	<u>Std. Error</u>	
Non-Veteran	(reference)			(reference)			(reference)		
Non-Combat Veteran	0.073	(.022)	***	0.318	(.121)	***	0.499	(.226)	***
Combat Veteran	0.049	(.028)	*	0.321	(.145)	**	0.518	(.263)	**

Notes: N=2,851. The top block of estimates are from Table 2, and the bottom block obtains estimates in the same manner except participation in veteran groups is excluded from the dependent variables. Standard errors are heteroskedasticity-robust. *: p<.1; **: p<.05; ***: p<.01. Complete regression results can be found in the technical appendix.

TABLE 6: Participation in Specific Groups, by Veteran Status
(Ordered Probit Coefficients)

<u>Category</u>	Without Education Controls				Including Education Controls			
	Non-combat Veteran		Combat Veteran		Non-combat Veteran		Combat Veteran	
Fraternal Service Veterans	0.113		0.121		0.065		0.092	
Political Union	0.242	***	0.264	***	0.203	**	0.259	**
Sports Youth	1.120	***	1.712	***	1.120	***	1.694	***
School	-0.105		-0.168		-0.155		-0.157	
Hobby/Garden	0.167	**	0.254	***	0.166	**	0.214	**
College Fraternity	0.154	**	0.259	***	0.097		0.220	**
Nationality	0.147	**	0.097		0.099		0.063	
Farm	0.129	*	0.147	*	0.094		0.152	*
Literature or Art	-0.055		-0.044		-0.095		-0.091	
Professional/Academic	0.303	***	0.465	***	0.320	***	0.505	***
Church	0.213	*	0.178		0.171		0.176	
	-0.206	*	-0.109		-0.237	*	-0.151	
	0.092		-0.057		0.042		-0.041	
	0.101		-0.032		0.095		0.079	
	0.063		0.006		0.027		-0.005	

Notes: N= 2,851. Coefficients are from ordered probit models which all include the explanatory variables found in Table 2. Standard errors are heteroskedasticity-robust. *: p<.1; **: p<.05; ***: p<.01. Complete regression results are found in the technical appendix.