Discrimination and State Capacity: Evidence from WWII U.S. Army Enlistment*

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Abstract

This paper investigates the empirical relationship between inclusion and state capacity, as theorized by Besley and Persson (2009). We examine the impact of racial discrimination on Black U.S. military enlistment during the onset of WWII. We find that discrimination had a large and negative effect on volunteer enlistment after the Pearl Harbor attack. The result is robust to a large number of controls that account for potential confounders. The negative effect of discrimination is moderated by geographical proximity to Pearl Harbor, and is larger for educated men. We provide consistent evidence for Japanese Americans.

Keywords: State Capacity, War, Institutions
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1 Introduction

A new and important branch of the political economy literature argues that state capacity is central for economic growth (e.g., Besley and Persson, 2009, 2010). Two of the insights from these works are that inclusive institutions complement state capacity (Besley and Persson, 2009) and that state capacity is a multi-dimensional object that goes beyond the narrower definition of the ability to raise taxes originally provided by Tilly (1993). At this time, there is little direct empirical evidence for the effect of inclusivity on state capacity or which examine dimensions of state capacity beyond taxes.

We aim to make progress on this important agenda by providing rigorous empirical evidence for the effect of discrimination on a dimension of state capacity that the empirical literature has not yet examined: military capacity during war. Our main outcome of interest is volunteer enlistment rates, an important aspect of capacity during wars (Alesina et al., 2020; Levi et al., 1997). The ability of a state to wage war critically depends on the motivation of its citizens to enlist as volunteers as well as conscripts (Levi et al., 1997). Providing inclusive institutions during wars can promote the motivation of men to fight (Alesina et al., 2020). The same logic implies that the lack of inclusion may discourage men from fighting; and relatedly, can hinder the efficacy of the war effort by deepening group divisions (e.g., Alesina and La Ferrara, 2005).[1]

This study examines the effect of the political and social exclusion perpetuated by racial discrimination on U.S. Black volunteer military enlistment at the onset of WWII. The effect of discrimination is *ex ante* ambiguous. On the one hand, discrimination may *discourage* Black men from volunteering. On the other hand, it may prompt higher volunteer rates if military service is viewed as a way to *signal* the value of Black citizens to the nation and is, therefore, a step towards reducing future discrimination. Our analysis will capture the net of the two forces.

U.S. military enlistment during WWII provides an interesting context for understanding the relationship between discrimination and state capacity. U.S. entry into the war was unrelated to racial discrimination within the country. Black men, who constituted ten percent of the population eligible for military service, were viewed by the government as critical to the war effort. The outcome of the war was very uncertain at its beginning. The U.S. anticipated needing all of its men and industrial power to succeed in the "total"

[1] Alesina et al. (2020) provides theoretical evidence that governments need to implement nation building strategies, which include providing public goods that are not related to the war, to promote a unified common national identity and motivate the population during wars. The same logic implies that discrimination, which excludes a group from public goods and deepens cross-group divisions, will reduce motivation for the war. Alesina and La Ferrara (2005) reviews the political economy literature on ethnic diversity and public goods, most of which focus on collective action problems.

war effort.[2] WWII occurred during one of the worst periods of U.S. racial discrimination. At the same time, substantial geographic variation exists for empirical analysis. By the end of WWII, a higher share of Black men had enlisted than white men, and their valor were renowned. But at the war's outset, participation was intensely controversial within the Black community, when many perceived little difference between the U.S. government and the Axis regimes. In response, the U.S. government enacted a large campaign to recruit Black soldiers in the second half of 1942.[3] We focus on the period before this recruitment campaign to identify the effect of discrimination.

To measure discrimination, we use a principal components measure of formal, informal, political and social discrimination at the county level. This measure reflects a person's own exposure to discrimination as well as the vertically (intergenerational) and horizontally (peer-to-peer) transmitted experiences of his community. We examine volunteer enlistment rates in the eight weeks before and eight weeks after the surprise attack by Japan on Pearl Harbor (December 7, 1941), which pushed the United States into WWII. The enlistment data are available at the individual level. The granularity of these data allow us to observe a sharp change at after Pearl Harbor and control for many potential confounders.

We begin by documenting several descriptive patterns in the data. First, Black volunteer enlistment rates increased immediately after the Pearl Harbor attack. However, the increase was lower in counties with higher levels of discrimination. Second, white volunteer enlistment also rose after the attack, but did not vary with discrimination. Since our measure of discrimination captures discrimination against the Black population, both patterns are consistent with discrimination reducing Black enlistment. Finally, we document that volunteer enlistment for Black men increased less than for white men in both types of counties. This is consistent with the fact that the Black population suffered severe discrimination everywhere, even in counties with *relatively* low levels of discrimination.

To estimate the causal impact of discrimination on volunteer enlistment, we use a strategy that is similar in spirit to a *triple-differences* (DDD) estimate. We compare volunteer enlistment rates right before and after Pearl Harbor, across counties with different levels of discrimination, between Black and white men. Conceptually, the DDD compares the *second-difference* (DD) estimates for white and Black men. The Black DD compares Black enlistment in counties with higher discrimination to that in counties with lower discrimination, before and after Pearl Harbor. The second difference allows us to control for potential confounders that vary across counties with discrimination. For example, counties with higher discrimination may be more urban, such that civic spirit and voluntary participation in public goods are generally lower there. The DDD compares the Black and white DD estimates,

[2] See Black (2002) for the definition of a total war.
[3] See Section 2.

which removes potentially confounding influences that vary with discrimination and time, and which affects the two races similarly. For example, after Pearl Harbor, manufacturing employment opportunities in war industries became more prevalent in relatively urban counties that had higher levels of discrimination. This would have increased the opportunity cost of enlistment and lowered volunteer rates.

Only the triple interaction coefficient is interpreted as plausibly exogenous. The main difference between this estimate and a DDD estimate is that the measure of discrimination is continuous and not binary. The baseline specification includes county-week fixed effects, which control for differences across counties over time; race-week fixed effects, which control for differences across races over time; and county-race fixed effects, which control for time invariant county-race-specific differences. The short event window is also helpful for identification in mitigating the number of changes over time that can confound our interpretation.

The main concern for the causal interpretation of our triple difference specification is the presence of potential confounders that vary with discrimination, time and race. For example, the access to war-time manufacturing employment after Pearl Harbor was not the same for Black and white men, and this gap may have varied with discrimination.[4] To address this possibility, we calculate the county population share employed in manufacturing for each race and county prior to Pearl Harbor, and control for each variable interacted with week fixed effects to allow its influence to vary fully flexibly over time. Following this logic, we address potential confounders that vary with race, county and time by including the interactions of a large number of county-race-specific characteristics and week fixed effects.[5]

Our coefficient of interest – the triple-difference estimate of the dummy variable for Black, the dummy variable for post-Pearl Harbor, and a continuous measure for discrimination – is negative, large in magnitude and statistically precise. This implies that the discouragement motive dominates the signaling one. The rise in Black volunteer enlistment during the eight weeks after Pearl Harbor was approximately 88% higher in a county at the 25th percentile of the discrimination measure in comparison to a county at the 75th percentile.

Both the discouragement and signaling motives are supply-side effects – e.g., discrimination in society and the military discouraged Black men to enlist. The main alternative to our interpretation is the possible presence of demand-side effects. This concern is motivated by historical accounts that the Army sometimes turned away Black soldiers during WWII. Sometimes, this was due to the limited capacity of the Army to house and train Black men (who were segregated from white men). Other times, it was due to discriminatory

[4]See, for example, Aizer et al. (2020) and Ferrara (2021) for studies of Black employment during WWII. In a related study, Fishback et al. (2020) document racial differences in access to New Deal work relief.

[5]The race-county specific variables include: labor force participation, employment, education, age, occupational income scores, the share of employment in manufacturing and farming, population size, and past migration rates. These are all measured before the period considered in our analysis. The baseline controls for each variable interacted with week fixed effects.

local Army boards being unwilling to accept Black men (Flynn, 1984). These demand-side effects confound the DDD estimates if capacity constraints or Army board attitudes were correlated with discrimination. We address this by controlling for race-county-week-specific *draft* enlistment rates. The capacity constraints and local army board attitudes affected volunteers and conscripted men similarly. Thus, including draft enlistment rates controls for demand-side factors. We also provide evidence against the alternative explanation that our main results are due to differences in the salience of the news about Pearl Harbor.

Our results are robust to the inclusion of many other potentially confounding variables. These include the presence of Black organizations (the NAACP, Black churches), distance from Pearl Harbor and Germany, the number of years that the state belonged to the Union, the presence of WWI Black veterans, and proximity to military bases. We present these and many other robustness exercises after the main results.

To enrich our understanding, we explore a large number of heterogeneous treatment effects. We find that the negative effect of discrimination was stronger in places further from Pearl Harbor, which suggests that the effect of discrimination was partly offset by the physical immediacy of danger. We find suggestive evidence of other heterogeneous treatment effects. They are statistically imprecise and discussed later in the paper. We also examine the characteristics of Black men who enlist and find that discrimination reduced the probability that educated Black men or those working in agriculture volunteered. That educated men were more discouraged by discrimination is consistent with the notion that political activism is increasing in education (Croke et al., 2016; Larreguy and Marshall, 2017) and that educated Black men probably faced higher opportunity costs of joining the Army.

The main analysis examines the effects of discrimination on Black volunteer enlistment in the eight weeks after the Pearl Harbor attack. We supplement this analysis with several additional findings. First, we find that our measure of discrimination is unrelated to the volunteer enlistment rates of other non-white races that we can identify in our data (Chinese, Japanese, Native Americans). This is consistent with the fact that our discrimination measure captures discrimination against the Black population, and suggests that such discrimination did not have spillover effects onto the enlistment behavior of other races. Second, we document that when Japanese Americans were allowed to re-enter the Army in 1943, enlistment was much lower on the U.S. mainland, where they were forcibly interred, compared to Hawaii, which did not inter. This is consistent with discrimination and disenfranchisement discouraging military participation. Finally, we examine Black volunteer enlistment patterns beyond the time frame of the main analysis. We document that Black volunteer enlistment rose in mid-1942, and that the increase is driven by counties with low discrimination. The cross-sectional pattern is consistent with the main finding that enlistment is

higher in places with lower discrimination. That the aggregate increase was delayed relative to the white population is consistent with discrimination reducing the motivation to enlist. We discuss the potential causes of the rise at the end of the paper. This is an important avenue for future research.

The findings of this paper provide novel and rigorous empirical evidence that discrimination reduces military participation, and therefore, hinders state capacity during war time. The results show that racial discrimination was an important determinant of the initial reluctance that Black men showed towards volunteering. They highlight a new way that discrimination can be socially costly.

Our study supports the notion that institutional inclusivity is important for state capacity (Besley and Persson, 2009), and that state capacity and the efficacy of public policy may be hindered by group divisions (e.g., Alesina et al., 2021, 2020; Alesina and Spolaore, 2005; Alesina and La Ferrara, 2005).[6] The results support Besley and Persson (2009) and Besley and Persson (2010), as well as the theory of military participation by Levi et al. (1997). In studying state capacity during war time, our paper is closely related to the literature on nation building. In particular, Alesina et al. (2020) examines how elites motivate soldiers during wars, and shows that individuals are more willing to exert effort if they believe that a defeat would reduce national public goods and services. Depetris-Chauvin et al. (2020) finds that the shared experience of national football teams' victories in sub-Saharan Africa fosters national identity. Bandiera et al. (2019) studies the introduction of compulsory schooling laws across U.S. states during the early twentieth century, as a tool to Americanize European immigrants. Alesina et al. (2021) investigates nation-building policies during the transition from dictatorship to democracy.

We are related to two branches of recent empirical studies in political economy. The first are recent studies which find that increased political participation is positively associated with tax contributions in historical Germany (Becker et al., 2019) and the D.R.C. today (Weigel, 2020).[7] The second are studies which find that U.S. military participation can be influenced by the father's participation (Campante and Yanagizawa-Drott, 2015), and, for WWII in particular, assimilation policies (Fouka, 2020) and New Deal spending (Caprettini and Voth, 2020; Ferrara and Fishback, 2020). Our findings also complement recent studies about the effects of inter-group contact during wars on racial attitudes after WWII (Schindler and Westcott, 2021) and the Korean War (Indacochea, 2019).[8] Finally, we add to the large

[6] See Alesina and La Ferrara (2005) for a review.

[7] Becker et al. (2019) uses historical German data to document that exposure to conflict increased political participation, which subsequently increased citizens' consent for taxation. In the D.R.C., Weigel (2020) finds that an increase in citizens' demand for participation in government as a response to having to pay taxes.

[8] Schindler and Westcott (2021) finds that the presence of African American soldiers during WWII reduced anti-minority sentiments in the U.K. – an effect that persisted for a long time. Indacochea (2019) documents that white veterans who fought in racially integrated units during the Korean War had lower racial prejudice

literature on discrimination by highlighting state capacity as another social cost.[9]

This paper is organized as follows. Section 2 discusses the historical background. Section 3 describes the data. Section 4 discusses the channels through which discrimination can affect volunteer military enlistment. Section 5 presents the empirical strategy and the main results. Section 6 presents additional findings. Section 7 concludes.

2 Background

2.1 WWII and Pearl Harbor

Prior to the attack on Pearl Harbor, most Americans perceived World War II as a distant and foreign conflict about abstract values such as democracy and Fascism. The United States was pushed into the war when Imperial Japan conducted a surprise military strike against the U.S. naval base at Pearl Harbor in Honolulu, Hawaii, at 7:48AM on Sunday, December 7, 1941. 2,403 Americans were killed and 1,178 others were wounded. 188 U.S. aircrafts were destroyed together with other physical military capital. The attack happened without a declaration of war amidst ongoing peace negotiations. Japan declared war on the United States later that day. The following day, the U.S. formally entered WWII when Congress declared war. Japan conducted additional and highly damaging strikes against the U.S. Pacific fleet in the following days, adding to a sense of a nation under attack in the United States. Pearl Harbor was the only major attack on U.S. territory during the entire war.

The outcome of the war was highly uncertain at the onset. The U.S.'s ability to command national resources for a large-scale international war in foreign territories was untested. Many military strategists doubted America's ability to coordinate its population and economy for total warfare.[10] At the time of Pearl Harbor, the Axis powers were effectively winning both in Europe and in Asia. Germany was expected by many to win the Battle of Britain. It already controlled Western Europe, and Operation Barbarossa on the Eastern Front was an astounding success. Japan had similar success in Asia and the Pacific. Important future turning points for the war such as the Battle of Stalingrad (ended in February 1943) and the Battle of Midway (fought in June 1942) were not foreseen within the early period of the war that we study.

The U.S. entered the war with the expectation of needing to fully mobilize its economy and manpower for a long and drawn-out total war, much like the United Kingdom. Motivating Black men, who constituted ten percent of the total number of eligible men, was seen

after the war.

[9] See Becker (2010) for a literature overview.

[10] For example, see the discussion in Jowett (2002).

by the governments of the United States and its allies as critical to the success of the war effort.[11]

The perceived necessity of Black men at the beginning of the War is important to keep in mind for interpreting our results on Black volunteer enlistment as affecting U.S. state capacity during the war.

2.2 Military Enlistment

Our main analysis focuses on the eight weeks right before and the eight weeks right after Pearl Harbor. Procedures for volunteer and draft enlistment were already in place and experienced little change during this short period.

There are several key facts about volunteer enlistment to keep in mind for interpreting our results. First, there were almost no changes in the operations of Army recruitment or eligibility criteria within the narrow window that we examine. The one change was the expansion of the age range of eligible men.[12]

Second, the criteria for accepting volunteers (e.g., health test) were similar for conscripts.[13] Once inducted, an enlisted man's occupation in the military depended on factors such as education and occupation prior to enlistment, as well as race. Important for our empirical strategy, it did not depend on whether the man volunteered or was conscripted; nor did it depend on the county of residence, which in our study and data, refers to the county where a man registered for selective service in 1941.[14] The main determinants of assignment were prior occupation and the level of education. Military wage compensation did not vary by race within grade, rank, years of service and factors such as having a specialist rating (Bartholomew, 1976).[15]

Finally, it was difficult to enforce the officially "race blind" enlistment process.[16] Enlist-

[11]For example, Winston Churchill expressed concerns that the U.S. government was not able to fully utilize its Black fighting capacity for the war (Reid and Manchester, 2012). See also Daniels (2019).

[12]The Selective Training and Service Act (STSA), signed by President Roosevelt on September 16, 1940, established the first peacetime draft in the United States. It required the registration of all men between the ages of 21 and 35, with selection for one year's service by a national lottery. By the summer of 1941, the STSA moved away from a national lottery to administrative selection, conducted by more than 6,000 local boards. After Pearl Harbor, on December 20, 1941, Congress passed Public Law No. 360, which allowed the STSA to extend the term of service to the duration of the war and an additional six months, and expanded eligible ages to 18 to 64.

[13]The most common individual characteristics considered by local boards for deferrals or exemptions are marital status, fatherhood, farm status, or German, Asian, and Italian ancestry (Acemoglu et al., 2004; Aizer et al., 2020; Ferrara, 2021).

[14]There is evidence that volunteers had some degree of discretion in choosing between branches in the U.S. military (Ferrara, 2021; Flynn, 1993). But there was no discretion for occupations or assignments within the Army, with very few exceptions.

[15]Wage discrimination against Black enlistees occurred by assigning Black men with a similar qualification as white enlistees to lower grade and rank, and making it more difficult to qualify for specialist ratings.

[16]This differed significantly from the WWI enlistment process. See Murray (1971) for a comparison of

ment of both volunteers and conscripts (the draft) were implemented by over 6,000 local boards, whose members were chosen from the local community.[17] Discriminatory Army boards resisted Black enlistment in our context (Flynn, 1993; Ferrara, 2021; Flynn, 1984). Black men were often rejected during pre-induction health examinations. Some of these were legitimate, while others may have been excuses for discriminatory boards to avoid Black enlistees.[18] Another reason for turning Black men away was that many Army bases lacked the physical capacity for housing and training Black men. Since the Army was segregated and there had been very few Black soldiers prior to Pearl Harbor, many bases were unable to immediately absorb Black enlistees right after the surprise attack.

These facts are important to keep in mind when interpreting the empirical results. Also important is the fact that the Army boards had control over both volunteers and conscripts, even though the latter were nominally drafted through a national process (Murray, 1971). Similarly, limited physical Army facilities affected volunteers and conscripts in the same way. We discuss this point in more detail when we consider alternative mechanisms after the main results.

During the period of our study, the majority of Black men were assigned to non-combat positions. These positions included both skilled (e.g., nurses, physicians, dentists) and unskilled individuals (e.g., porters). As in all wars, logistics and support positions are essential for military functions. During WWII, approximately 51% of all enlistees were assigned to such positions.[19]

That few Black men were ultimately assigned to combat positions does not mean that those who enlisted at the beginning of the war anticipated lower risk when volunteering. Throughout the war, there was great uncertainty in the future of Black combat troops caused by the widely diverging opinions amongst the nation's leaders and the war situation. On the one hand, there were those who opposed Black combat troops. On the other hand, a great push within the government had been made to do exactly the opposite, albeit with limited success. For example, the U.S. Air Corps started training Black men at the Tuskegee Army Air Field in 1940. A total of 14,000 men (including support staff) were trained. The "Tuskegee Airmen" was first deployed in April 1942 in North Africa and flew its last combat mission in April 1945 (Moye, 2010). The number of Black combatants also depended on the

Black enlistment in the two World Wars.

[17] Only 1.1% were Black, and only three Southern states had any Black officials. See Davis (1955), Table 1. Page 34.

[18] The high rejection rates for health reasons in Georgia resulted in Selective Service officials complaining that "The rejection rate is exceedingly high and it is very difficult for Georgia to fill calls for Negroes-they simply don't want them" (Lee, 1966). The most frequent cause for Black rejection was "mental deficiency", i.e., the label for failing the literacy requirement (being able to write at the 4th grade level). Historians have argued that the literacy standard was adopted mainly to reduce Black enlistment (e.g., Dalfiume, 1969). The AGCT test adopted in 1943 faced similar criticism.

[19] McGrath (2007), Figure 52.

conditions of the war. As American involvement escalated, more Black troops were deployed for combat.[20]

On December 5, 1942, an executive order banned volunteers so that the government could have full control over the labor force.

Race relations within the U.S. military mirrored those of the nation, which we discuss in the next section and in Appendix A. Black and white soldiers were segregated until 1948. During WWII, they had separate canteens, barracks, nurses and even blood banks. Black soldiers served under Black or white officers. White soldiers only served under white officers.[21]

2.3 Contemporary Discussions about Black Involvement in WWII

The U.S. entered WWII in one of the worst periods of racial discrimination. Black men had very limited civil and political liberties, due to both formal and informal discrimination. Discrimination severely restricted their political, economic, and social opportunities relative to the white population in all parts of the United States. For interpreting our results, it is important to note that Black workers benefitted very little from war industries relative to white workers, especially during the early part of the war that we study (Davis, 1955). See Appendix A for a more detailed discussion.

When WWII erupted, a heated debate emerged within the Black community. On the one hand, there were those who viewed military service as a hard-earned right. Similarly, many hoped that military service would have been an effective way to demonstrate the value of Black citizens to the United States, and that this would have led to a reduction in future discrimination. These were the views that led approximately 350,000 Black men to enlist during WWI.[22] On the other hand, there was much disappointment with the lack of social progress following WWI. Based on what was known at the time, the discriminatory policies of the U.S. seemed little better than those prevailing in the Axis powers.[23] Soon after Pearl

[20]The 92nd Infantry Division (the "Buffalo Soldiers") was the first to be sent into combat in 1944. The 761st Tank Battalion (the "Black Panthers") was first deployed at the end of 1944. Other Black tank battalions were deployed in 1945.

[21]For a detailed description of race relations and Black enlistment in WWII see Lee (1966) and Flynn (1984).

[22]See, for example, Astor (2001) and Moore (2005).

[23]The worst atrocities such as those of the Holocaust and Camp 731 in Manchuria were not yet known. There were many explicit comparisons of the U.S. to the Nazis. For example, prior to Pearl Harbor, in 1937, *The New York Amsterdam* wrote "[Nazis' plan to segregate Jews on German railways was] taking a leaf from United States Jim Crow practices". In 1935, it wrote "If the Swastika is an emblem of racial oppression, the Stars and Stripes are equally so....". "Why should Negroes fight for democracy abroad when they are refused democracy in every American activity except tax paying?" wrote George Schuyler, Columnist for the *Pittsburgh Courier*. Langston Hughes wrote "..You tell me that Hitler / Is a mighty bad man / I guess he took lessons from the Ku Klux Klan [...] I ask you this question / Cause I want to know / How long I got to fight / BOTH HITLER — AND JIM CROW" (Hughes, 1943). The ostensible pointlessness of fighting is

Harbor, in a poignant (and later famous) letter to the *Pittsburgh Courier* on January 31, 1942, a 26-year-old Black man, James G. Thompson, wrote "Should I sacrifice my life to live half American? ... Will things be better for the next generation in the peace to follow?... Is the kind of America I know worth defending?"

Partly in response to the low Black enlistment rates during the beginning of the war, the U.S. government embarked on an extensive recruitment campaign starting in the Spring of 1942. The campaign was not one decisive change, but rather a series of different efforts from different parts of the military and government. Some also pushed for better treatment within the U.S. military, with limited success. Nevertheless, Black volunteer enlistment dramatically increased in the second half of 1942, and remained high until the end of the year, when volunteer enlistment was abolished. We discuss this more in Section 6, after presenting the main results.

To isolate the impact of discrimination and avoid the possibly confounding influences of the later propaganda efforts and events (e.g., victory at the Battle of Midway), we focus on a short window of time before the onset of recruiting efforts. Restricting our attention to the two months after the attack on Pearl Harbor also makes it less likely that our estimates are confounded by changes in war-related economic production or military recruitment. We discuss these issues in more detail when we present the empirical strategy.

3 Data

3.1 Enlistment Data

Enlistment is reported at the individual level in the *World War II Army Enlistment Records* (NARA-AAD), for the period 1938-1946 (NARA, 2002). It includes 9,039,840 individual service records (induction cards) of American soldiers who served in the Army from 1938 to 1946, and were digitized by the National Archives. The individual-level data include information about the date of induction, birth year, education, occupation, marital status, race, citizenship, volunteer status, branch and rank, as well as county of residence. In most cases, the demographic and socio-economic information was reported for Selective Service in 1940, more than one year before Pearl Harbor. This mitigates concerns of endogenous location (and other information) in response to the U.S. entry into WWII.

In some cases, induction can occur after a volunteer applied or the receipt of a draft "call-up" notice. During the early stages of the war, there were delays, as the military did not always have adequate facilities for housing and training the rapidly increasing number of

articulated in 1939 by Black writer, C. L. R. James, when he wrote "Why should I shed my blood for the whole Jim Crow, Negro-hating South, for the low-paid, dirty jobs for which Negroes have to fight, for the few dollars of relief and insults, discrimination, police brutality, and perpetual poverty to which Negroes are condemned even in the more liberal North?".

soldiers. In some places, this was particularly limiting for Black soldiers because the Army's historical reluctance to enlist them meant that were very few Black facilities.

The main analysis uses a sample that includes Black and white men, who, taken together, account for more than 93% of all individuals in the enlistment data. We discuss other races in Section 6. The baseline sample includes the 48 mainland states for which our data can be disaggregated to the county level.[24] Our main sample includes 2,257 counties, and observations are at the county-race-week level.[25] The aggregation is necessary because we normalize enlistment by the number of eligible men in each county-race-week cell. All descriptive statistics and regressions presented below are weighed by the number of eligible men.

The main outcome of interest in our analysis is the enlistment rate – the number of volunteers of each race in each county and week for every 100,000 eligible men. We use the 1940 full-count U.S. Census to calculate the number of eligible men. This denominator is adjusted to account for the change in eligible ages on December 20, 1941.[26] The 1940 Census also provides a number of control variables that we will describe when relevant.

We use numerous other datasets that we discuss later when relevant.

3.2 Descriptive Statistics

3.2.1 Discrimination

To measure discrimination parsimoniously, we calculate the first principal component of political and social discrimination for the county of enlistment, combining different variables. We consider the key variables typically used to measure racial discrimination in the economic history literature that vary at the county level and that are available for the entire U.S.: the presence of the Ku Klux Klan from 1915 to 1940, the number of lynchings until 1939, the Democratic vote share in Congressional and Presidential elections between 1900 and 1930, racial income inequality, and the Logan and Parman (2017) index of residential segregation, isolation, and dissimilarity.[27]

Our discrimination measure captures the experience of enlisted men and those of their ancestors that was transmitted across generations.

We report the mean and standard deviation of the discrimination measure at the bottom of Table 1.[28]

[24] Information is not reported from all Army boards from Service Command 7 (Colorado, Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota, and Wyoming). In the Appendix, we verify that results are similar if we omit these states from the analysis.

[25] The counties that lack variation in enlistment rates during the time frame of our analysis are excluded from the sample.

[26] See Section 2.

[27] Appendix Table A.3 lists the sources for each variable.

[28] Appendix Figure A.1 maps discrimination demeaned by state fixed effects (since our estimate exploit

To validate the discrimination measure, we examine its correlation with two out-of-sample measures of discrimination: the 1948 vote share for Strom Thurmond and a summary measure of racial inequality in school quality as of 1940 in the spirit of Carruthers and Wanamaker (2017).[29]

3.2.2 County Characteristics

Table 1 presents the summary statistics for selected county characteristics.[30] In 1940, 9.9% of the population in our sample was Black and 89.6% was white. The average share of the population with ancestry from Germany, Italy, and Japan (the Axis powers) was 1.7%, 3.2%, and 0.04%. On average, the urban population share was 63.9%, and approximately half of the county area was farmland. During the eight weeks after Pearl Harbor, an average of 8.64 Black men (per 100,000 eligible individuals) volunteered. This number is more than four times smaller in the South (4.86) than in the rest of the country (18.49). Note that the empirical strategy will exploit within-state variation.

3.2.3 Correlates of the Discrimination

In Table 2, we examine the county-level correlates of discrimination. All regressions control for state fixed effects and are weighed by the number of eligible individuals during the sample period considered in our analysis. For comparability across variables, we report the standardized coefficients in square brackets. The sample mean and standard deviation of each correlate is reported at the bottom of each panel.

In Panel A, we consider baseline demographic characteristics. Discrimination is positively correlated with the Black county population share; the population share of those with German, Italian, and Japanese ancestry (the latter is statistically imprecise); and total county population.[31]

Panel B examines variables specific to the Black community that may have influenced Black men's decision to enlist in WWII. The correlation between discrimination and the presence of a chapter of the National Association for the Advancement of the Colored People (NAACP) is positive but statistically insignificant (column 1). Discrimination is positively associated with the 1936 membership rate in Black churches (column 2) and negatively associated with the share of Black men who were WWI veterans (column 3). There is no correlation between discrimination and the share of Black men eligible to serve in WWII living with a WWI veteran (column 4) and the share of Black men eligible to serve in WWII

within state variation). The map shows substantial variation within states.

[29] See Appendix B.1.

[30] Appendix Table A.1 provides a detailed description and the source of each variable.

[31] Also, discrimination is negatively correlated with white population share. Since most of the population is white or Black, this follows from the positive correlation between Black population share and discrimination.

living in a household with a WWI veteran who is not the head (column 6). There is a strong and positive correlation between discrimination and the share of Black men eligible to serve in WWII living with a WWI veteran who is the household head (column 5).[32]

Finally, Panel C examines WWII government spending and New Deal expenditures as well as distance from Pearl Harbor, Germany, and Japan. These factors can affect the motivation of Black men to enlist by influencing their attitude towards the U.S. government or the immediacy of the threat from the Pearl Harbor attack or WWII more generally. Discrimination is positively associated with WWII government spending (column 1), non-agricultural New Deal grants (column 3), distance from Pearl Harbor (column 4) and distance from Japan (column 6); and negatively associated with agricultural New Deal relief spending (column 2) and distance to Germany (column 5).

In the main analysis, we will address the fact that discrimination is correlated with county-specific features by controlling for county-week fixed effects.

3.2.4 Race–Specific Correlates of Discrimination

Table 3 examines the correlates of discrimination that we can measure separately for Black and white populations. At the bottom of each panel, we report the mean and standard deviation of each variable. White individuals are on average older and more educated than Black individuals. The employment and the labor force participation rates for men 18-64 are similar among white and Black Americans. However, the latter are more likely to be employed in agriculture, and less likely to work in manufacturing. Occupational income scores are lower for Black men than for white men.[33]

For both Black (Panel A) and white (Panel B) men, discrimination is positively correlated with age (column 1), educational attainment (column 2), the population share in the labor force (column 3), log occupational income score (column 5), the population share employed in manufacturing (column 6); and, negatively associated with the population share employed in farming (column 7). However, the correlations do not always have the same sign for both races. Column (4) shows that the association between discrimination and the employed population share is positive for Black men and negative (albeit statistically insignificant) for white men.[34]

[32]The number of observations in columns (3) to (6) is lower than in the rest of the table, because for a few counties in our sample there was no Black men within the eligible age range for WWI or within the eligible age range for WWII in the 1930 U.S. Census. See the Data Appendix B.2 for a discussion of the NAACP, Black churches and WWI veteran measures.

[33]Occupational income scores are the standard measure of lifetime earnings used in the economic history literature when there is no income data. They are based on the median income of a job category in 1950.

[34]Labor force participation and employment rates are highly correlated, but conceptually different, since not all of those who participate in the labor force are employed at a given point in time. We scale both measures by the number of working-age men.

In the regression analysis, we will address such potential differences across race by controlling for county-race-specific variables interacted with week fixed effects (in addition to county-race, county-week, and race-week fixed effects).

3.2.5 Volunteer Enlistment Patterns

Our main outcome of interest is the weekly volunteer enlistment rate – i.e., the number of volunteer enlistees per 100,000 eligible men. The time coverage of our analysis includes the eight weeks before and the eight weeks after the Pearl Harbor attack.

Figure 1 illustrates enlistment rates over time for high and low discrimination counties for each race, and shows the variation driving the DDD estimates. We divide counties into those that have discrimination values above and below the sample median. We find that, for Black men (black-colored lines), enlistment rates were above zero but negligible before the Pearl Harbor attack for all counties. Within one week after the Pearl Harbor attack, enlistment rates increase, and the increase is persistently higher in counties with lower discrimination (dashed line). For white men (gray colored lines), the temporal pattern is similar to that of Black men: there is a rise in enlistment after Pearl Harbor. However, the spatial patterns differ – there is little difference between counties with high and low discrimination.[35]

There are no pre-trends. Until Pearl Harbor, volunteer enlistment rates for both races and in all counties evolved along parallel trends. That white enlistment rates were higher in all counties prior to Pearl Harbor is consistent with Black men facing discrimination everywhere – even in counties with relatively lower discrimination.

The figure indicates that discrimination will reduce Black volunteer enlistment relative to white volunteer enlistment. The DDD regression in the next section will allow us to control for omitted variables for a causal interpretation, and to estimate the statistical precision of the effect.

4 Conceptual Framework

4.1 Discrimination and the Motivation to Enlist

To understand volunteer enlistment during the initial stages of WWII, we follow the seminal work of state capacity and military motivation during war time from political science, Levi et al. (1997). Levi et al. (1997) dichotomizes wars into two periods. At the beginning of war, the government first demands voluntary contributions and citizens decide how much

[35]To have a fully symmetric window around the attack on Pearl Harbor, we consider eight-week period before Pearl Harbor (week -7 to week 0) and the eight-week period afterwards (week 1 to week 8). Week 0 (week 1) is defined as the week ending (starting) on Sunday, December the 7th (Monday, December the 8th).

to contribute. In the second stage of war, if citizens do not provide enough voluntary contributions, the government introduces legal requirements (i.e., a draft), at which point citizens can decide whether to comply or evade. Our paper and the discussion focus on the first stage.

Through the lens of this framework, discrimination influences the motivation of Black men to volunteer through several channels; and the effects can be positive or negative. We discuss them below.

First, Levi et al. (1997) argues that volunteer rates will be high amongst citizens who have the greatest economic gains from joining. Economic value refers to both public goods and private goods. The effect of discrimination on enlistment through this channel is ambiguous *ex ante*. Winning the war (i.e., the continuation of the regime) is a national public good. Discrimination may lower its value for Black men, who had access to less and lower quality schooling and police protection and other public goods; and were effectively disenfranchised. However, discrimination can also increase volunteer enlistment if Black men viewed military service as a way to lower future discrimination (and thus increase the value of the public good).

The effect of discrimination through private economic gains is ambiguous for similar reasons. Moreover, there is an additional layer of ambiguity. Discrimination can affect a Black man's perception of how he will be treated in the Army. On the one hand, a man who experienced more discrimination may expect worse treatment than a man who experienced relatively less discrimination, and may thus be less motivated to enlist. On the other hand, a Black man from a county with higher discrimination may have worst opportunities outside the Army, and may thus be more likely to enlist. Recall that assignment and pay within the Army did not depend on the county of origin.

Second, Levi et al. (1997) argues that volunteer rates will be higher for men who believe that others in their group will also volunteer (i.e., peer effects). The effects of discrimination through this channel are ambiguous and depend on whether Black men think that other Black men are more likely to join in order to signal their value to the nation, or less likely to join because of the discouragement effect of discrimination.

Third, Levi et al. (1997) argues that volunteer rates will be high amongst citizens that have a high degree of trust in the federal government. Discrimination will reduce trust and Black enlistment. In related work, Alsan and Wanamaker (2018) documents that historically discriminatory practices in medicine reduced trust of the Black population towards the medical establishment today. A similar logic applies to trust in the political establishment.

Finally, Levi et al. (1997) posits that volunteer rates will be higher for those who believe in the legitimacy of the regime. Historical evidence indicates that discrimination reduced the legitimacy of the U.S. government in the eyes of the Black community. Thus, discrimination

will reduces enlistment through this channel.[36]

Discrimination can affect enlistment through several additional channels outside of the framework provided by Levi et al. (1997). First, it can lower the emotional value associated with the public good, weakening national identity. America in 1940 was a nation explicitly ruled by and intended to serve the interests of white Americans. The establishment openly followed Eugenics theory, and believed in the genetic and moral superiority of those with European ancestry over all others (Guterl, 2009; Spiro, 2009).[37] Second, the political psychology literature has documented that discrimination reduces a person's sense of self-efficacy (Oskooii, 2016, 2018). This, in turn, lowers civic and political engagement (Komisarchik et al., 2019). If enlistment during the war is a form of civic engagement, discrimination might reduce Black volunteer enlistment.

4.2 Identification

We estimate a triple interaction effect that is similar in spirit to a *triple differences* (DDD) strategy to obtain the causal effect of discrimination on Black volunteer enlistment rates. We compare volunteer enlistment rates for men who lived in counties with varying levels of discrimination, before and after the Pearl Harbor attack, between Black and white men.

The baseline equation is the following

$$y_{ijt} = \alpha + \beta D_j \times P_t \times B_{ij} + \Gamma X_{ijt} + \theta_{ij} + \lambda_{it} + \pi_{jt} + \varepsilon_{ijt}. \tag{1}$$

The dependent variable, y_{ijt}, is the share of eligible men of race i in county j who were inducted as volunteers in the U.S. Army during week t. It is a function of the triple interaction of a measure of historical discrimination in county j, D_j, a dummy variable that equals one for the eight weeks after the attack on Pearl Harbor, P_t, and a dummy variable that equals one if race i is Black, B_{ij}. Lower order terms are absorbed by the fixed effects at the county-race, λ_{it}, county-week, π_{jt}, and race-week levels, θ_{ij}. Thus, the model is fully saturated. X_{ijt} includes county-race specific controls interacted with week fixed effects, which we discuss and motivate later. All regressions are weighed by the race-specific population

[36] Levi et al. (1997) also posits that volunteer rates will be higher if the relevant cultural and community organizations sanction the war. Conceptually, the stance of such organizations is likely to be endogenous to other factors, such as trust and the economic value of the war to the Black community. We will examine the influence of the presence of organizations such as NAACP and Black Churches later in the paper.

[37] Related to the idea that discrimination weakened national identity is the "activation" mechanism from the social psychology literature. Discrimination could have acted as cultural priming for Black individuals, such that the Pearl Harbor attack did not activate the salience of national identity as much for Black men as for white men. As a result, the surge in volunteer enlistment rates would have been lower amongst Black men relative to white men. There is a large body of evidence on cultural priming in social and political psychology. For example, studies have documented that an individual can interpret the same event differently if she is primed with different cultural knowledge (Kitayama and Cohen, 2010).

of eligible men in each county-week. The standard errors are clustered at the county level.

Conceptually, the DDD is the difference between the *second differences* (DD) for Black and white men (recall Figure 1). The intuition is as follows. The comparison of Black enlistment between a high and low discrimination county reveals the association between discrimination and enlistment. However, there may be other factors which differ across these counties that affect enlistment such as geographic remoteness. There are also differences between high and low discrimination counties that change over time. For example, Pearl Harbor increased the geographical proximity of the war more for counties with lower discrimination (see Table 2). Since the proximity change is similar for Black and white men living in the same county, we account for this by comparing the Black and white DD estimates. The main difference between our baseline estimate and a DDD estimate is that our measure of discrimination is continuous.

Only the triple interaction effect is interpreted as plausibly exogenous. In addition, county-race fixed effects control for time-invariant factors that vary by race and county, such as occupation or educational attainment. County-week fixed effects control for all differences across counties that vary over time, such as economic conditions. Race-week fixed effects control for differences across races that vary over time, such as changes in national race-specific war propaganda. For an omitted variable to confound our estimates, it would need to differ by county, time *and* race; *and* to be unaccounted for by the baseline controls. We address this by including a large number of county-race characteristics, each interacted with week fixed effects. We discuss when we present the baseline results in the next section.

Note that by focusing on a narrow window of time around the attack, we mitigate the possibility that other factors (e.g., social norms, values, segregation within the U.S. military, WWII economic policy) may have changed. We discuss robustness issues more after presenting the main results.

5 Main Results

5.1 Baseline Estimates

Table 4 presents the baseline estimates. In column (1), we start from a specification that includes the uninteracted Black dummy variable and the other lower order interaction terms in lieu of the fixed effects. The triple interaction is negative and statistically significant at the 1% level. Consistent with Figure 1, the estimate shows that discrimination reduced Black enlistment after Pearl Harbor.

In columns (2) to (5), we gradually introduce the additional baseline controls, which absorb the lower order interaction terms and state fixed effects. To understand the motiva-

tion behind the fixed effects, it is useful to consider the potential omitted variables in the estimate in column (1).

First, recall from Table 2 that many variables, such as population and immigrant population share differed between counties with high and low discrimination. To account for the possibility that these county-characteristics influence enlistment in a way that changes over time (i.e., after the U.S. enters the war), we control for *county-week fixed effects*. Second, there are race-specific differences. For example, Black men had lower income and education on average, which affected the opportunity cost of joining the Army. Lower education may have also affected access to information or the way that a person interpreted news about the war. To account for how differences across race influence enlistment decisions in a time-varying way, we include *race-week fixed effects*. Third, there are county-race-specific characteristics that affect enlistment. Recall Table 3, which showed that the correlates of socio-economic variables and discrimination often had different magnitudes, and even signs, for Black and white men. Some of these factors affect enlistment in a way that does not change after Pearl Harbor. The influence of such time-invariant factors are controlled for by *county-race fixed effects*.

However, there are factors which vary by race and county that affect enlistment differently after the Pearl Harbor attack. To address this, we control for a large number of *county-race variables interacted with week fixed effects*. For example, a natural concern in our context is that Black men gained less than white men from war industry economic opportunities which arose after Pearl Harbor, and that the gap varied with discrimination. In practice, this is unlikely to bias our estimates because these policies typically did not come into place until later in the war.[38] Nevertheless, to be cautious, we address this concern by controlling for a large number of demographic and economic variables that capture potential differences in the opportunity cost of enlistment for Black and white men. We calculate the average of each of these variables for working age men in each county and race in the 1940 Census, and interact each county-race mean with week fixed effects to allow its influence to vary over time. The county-race variables are: the share in the labor force, employment rate, average years of education, average age, average occupational income scores, the share of employment in manufacturing and farming, and log population.

Another concern is that pre-Pearl Harbor migration rates may have differed for Black and white men between counties with higher and lower discrimination. For example, if Black men were more likely to move out of counties with higher discrimination, and movers were less likely to enlist (e.g., because they were the most politically engaged and sensitive

[38]Recent studies of a slightly later period find that war industry and spending led to significant skill upgrading for Black men and a reduction in the racial wage gap (Ferrara, 2021; Aizer et al., 2020). Fishback et al. (2020) documents that access to earlier government subsidies, such as those from the New Deal, varied by race.

to discrimination), then the DDD will be biased downwards. To address this, the baseline controls for the interaction of week fixed effects with cross-county net migration for each race between 1930 and 1940 estimated in Gardner and Cohen (1992).[39]

The baseline DDD coefficient reported in column (5) is -2.79, and is statistically significant at the 5% level. This implies that, after Pearl Harbor, in a county where the index of discrimination was one standard deviation (1.6) lower, the volunteer enlistment of Black men was 0.7 standard deviations, or 4.5 per 100,000 eligible individuals, higher.[40] In other words, reducing the level of historical discrimination by one standard deviation would have increased the volunteer enlistment of Black men by a factor of forty relative to the average of the pre-Pearl Harbor period (0.11 per 100,000). Since the average Black volunteer enlistment rate during the entire window considered in our analysis is 6.02 per 100,000 and the inter-quartile range of discrimination is 1.9, Black men would have been 88% more willing to volunteer in a county at the 25th percentile of discrimination, as compared to those living in a county at the 75th percentile.

The negative sign of the triple interaction coefficient of interest implies that the discouragement motive dominates the signaling motive. The magnitude of the discrimination effect is large. This is not altogether surprising given the intensity and prevalence of discrimination in our context. For comparison, Fouka (2020) finds that exposure to anti-German language laws during WWI lowered German Americans' propensity to volunteer during WWII by 2.6 percentage-points (11%) relative to cohorts of Germans who were not directly exposed to these laws. Caprettini and Voth (2020) documents that doubling New Deal expenditures in a county raised volunteering by 8%.

Figure A.3 presents the (binned) residual scatterplot for the relationship between volunteer enlistment (y-axis) and the triple interaction of discrimination, the race dummy, and the post-dummy (x-axis). It shows that our main results are not driven by observations with extreme values of either discrimination or volunteer rates.[41]

[39] Recall that the location observed in the NARA dataset is usually the location in 1940.

[40] This number is obtained by multiplying the coefficient in column 5 (-2.79) by one standard deviation of discrimination (1.6), and dividing the resulting quantity by one standard deviation of the pre-Pearl Harbor Black volunteer enlistment rate (6.4).

[41] In Appendix Table A.4, we examine each component variable of our discrimination measure separately, and find that all coefficients are negative, and the ones for the Democratic vote shares in Presidential (column 1) and Congressional (column 2) elections and for the presence of the KKK (column 3) are statistically significant.

5.2 Alternative Interpretation

5.2.1 Demand-Side Changes

The main alternative to our preferred supply-side interpretation is that low Black enlistment in high discrimination counties were driven by demand-side factors from the Army. Army boards were established prior to Pearl Harbor and there are no accounts of systematic changes to their operations or members right after Pearl Harbor within our study period. Thus, the county-week fixed effects in the baseline specification account for differences across counties that do not additionally differ by race. For example, the location and physical distance to Army recruiters and its influence on the ability to volunteer after Pearl Harbor is accounted for by county-week fixed effects.

Our main concern is that counties with higher levels of discrimination may have turned away a higher share of Black volunteers after Pearl Harbor. For example, if resistance to enlisting Black men or the lack of facilities to house and train Black soldiers was a more serious problem in highly discriminatory counties after Pearl Harbor, then the DDD estimate will overstate the true discouragement effect of discrimination.

To address this, we control for the draft enlistment rate for each race, county and week. The officially national draft was, in practice, implemented by local boards, which had as much (if not more) control over the timing of inducting conscripts as volunteers. Volunteers and drafted men were pooled together after induction, living and training in the same facilities. Thus, both the behavior of local boards and the physical constraints for accepting Black men should have been similar for volunteers and conscripts. Column (6) of Table 4 shows that the triple interaction coefficient is the same as the baseline in column (5).[42] This goes against the demand-side explanation.

5.2.2 News Coverage of Pearl Harbor

A second alternative explanation is that the salience of Pearl Harbor and America's entry into the war was lower for Black men in counties with higher discrimination. This seems unlikely given historical accounts of the news of the attack having been reported immediately throughout the entire nation. Moreover, the county-week and race-week fixed effects of our baseline estimates account for the possibility that news penetration differs by population density or the size of a county; and the county-race week controls interacted with week fixed effects account for the possibility that factors such as differential residential, demographic, occupational patterns can affect news access.

Nevertheless, to be cautious, we examine coverage in local newspapers, one of the main news platform and one for which we can consistently observe coverage at geographically

[42] Without rounding, the two estimates differ in the fourth decimal place.

disaggregated levels.[43] We search for articles that mention the terms "Pearl Harbor" and "Japs", the derogatory term for the Japanese. To account for differential newspaper lengths across papers and time, we normalize mentions by the number of pages containing the word "and". Thus, our coverage measure reflects the share of coverage in a given paper and week.[44]

Figure 2 Panels A and B show that there is little difference between high (solid line) and low (dashed line) discrimination counties. We find similar patterns when we examine articles with the terms "Army" and "We Need You", one of the most used phrases in Army recruiting (see Panels C and D).

Coverage was also similar between Black and white/mainstream papers. For example, all papers had at least one front page mention of Pearl Harbor or the war in the newspaper every day for the first month after the attack. These statistics are not reported in tables. We do not divide the papers across counties and race because our sample contains only six Black newspapers.[45]

The evidence is consistent with the conventional wisdom that news of Pearl Harbor was reported immediately throughout the U.S. and was unlikely to have systematically varied across counties with different levels of discrimination or between Black and white men.

5.3 Robustness

5.3.1 Black Community Organizations

In Table 5, we investigate the sensitivity of our estimates to additional controls that may be correlated with discrimination. In column (2), we estimate the baseline specification for the sample of counties for which all additional controls can be included. The interaction coefficient is very similar to the full sample estimate that is re-stated in column (1) for comparison purposes. In column (3), we consider two important organizations for the Black community. The first variable is whether a NAACP chapter was present in the county in any year between 1919 and 1940. The second one is the 1936 county-level membership rate in Black churches. Both of these organizations were platforms for communication and organization within the Black community.[46]

In column (4), we examine the distances from the county to Pearl Harbor and to Germany, which may have influenced the propensity to volunteer by mediating the immediacy of threat posed by the attack on Pearl Harbor. Columns (5) and (6) examine the proximity

[43] Local newspapers data come from the website Newspapers.com. Data are available for 584 of the 2,257 counties in our main sample.

[44] The results are very similar without normalizing. They are available upon request.

[45] The Black papers in the sample are *California Eagle*, *The Detroit Tribune*, *The Mobile Weekly Advocate*, *The New York Age*, *The Pittsburgh Courier*, and *The Weekly Review*.

[46] For example, see Chay and Munshi (2015), Dippel and Heblich (2021), and Woodson (1921). For more details about the definition and source of the variables, see Appendix B.2.

to an Army base (that was active as of December 1941) and the number of years that the state (and the counties within) was a part of the United States.[47]

Column (7) conducts a horse race between the main triple interaction of interest and the additional triple interactions. All estimates include the triple interaction of the additional control variable with the Black and post-Pearl Harbor dummy variables, as well as all lower order interactions. For brevity, the table only reports the triple interaction. We find that the triple coefficient of interest is robust. It is statistically significant at the 5% level and statistically similar in magnitude as the baseline.

The additional triple interactions show that the presence of the NAACP and the years that the state was part of the Union are positively associated with Black enlistment after Pearl Harbor. Both are consistent with Levi's (1997) argument discussed in Section 4. The NAACP triple interaction is consistent with the role that the NAACP played in recruiting Black men for the U.S. Army, and the argument that sanction by community organizations can increase motivation. The years-in-the-Union triple interaction is consistent with the notion that men are more motivated if they view the state as legitimate and/or identify more strongly with the state.

5.3.2 WWI Veterans

In Table 6, we consider the influence of Black WWI veterans, whose impact on the motivation of a younger generation of Black men to enlist is *ex ante* ambiguous. On the one hand, historical accounts emphasize the disappointment in the Black community after WWI, which may have reduced later enlistment. On the other hand, the motivation to join the military may be transmitted from father to son (Campante and Yanagizawa-Drott, 2015), which implies that WWI participation may have led to higher enlistment during WWII.[48] We create four measures of exposure to WWI veterans. The first one is the number of Black WWI veterans in the county, scaled by the number of Black men in the county who, given their age, would have been eligible to serve in WWI. The second is the share of Black individuals in each county eligible to enlist in WWII who were living in a household with a Black WWI veteran. The third and the fourth measures further distinguish between the share of Black men living in households where the WWI veteran was and was not the household head.[49]

[47] To obtain the distance of each county from the closest military base, we proceeded as follows. First, we compiled the list of all camps and bases that were active as of December 1941 from multiple sources. Next, we excluded those that were not involved with Army operations (since our enlistment data only focuses on the Army). Finally, we obtained the coordinates of each base, and calculated the distance to the county centroid.

[48] Campante and Yanagizawa-Drott (2015) studies Black and white men.

[49] See Appendix B.2 for more details.

As before, we report the baseline specification in columns (1) and (2) for the full sample and the sample of counties for which we have the additional control variables. In column (3), we examine the first two measures of WWI veterans' presence. In column (4), we examine the third and the fourth measures. Columns (5) and (6) conduct horse races between the discrimination triple interaction and the triple interaction of WWI veterans. The discrimination triple interaction is robust and very similar to the baseline. The triple interactions of living with a WWI veteran are mostly positive in sign, but statistically imprecise. This suggests that for Black men in WWII, the intergenerational transmission mechanism highlighted by Campante and Yanagizawa-Drott (2015) is partly countered by the the disappointment effect discussed in the historical literature.

5.3.3 Additional Sensitivity Checks

We show that the results are similar if we control for alternatively lagged draft enlistment rates, the rates of race mis-classification (e.g., passive or active choice for Black men to enter the Army as "white"), restrict to the sample that omits Command 7 area for which the enlistment data are incomplete, or use alternative methods of estimating the standard errors. The results are also robust to omitting outliers and controlling for the distances to places of particular importance to the Black population: Tuskegee, Tulsa, where *48ers* settled, and civil refugee camps. See Appendix Section C.

5.4 Heterogeneous Effects

Table 7 examines the heterogeneous effects of discrimination. We split the sample according to factors that might exacerbate or moderate the discouragement effects of discrimination as motivated by the historical literature. At the bottom of the table, we report the p-value from Seemingly Unrelated Regressions (SURs) to compare the estimates from the two sub-samples.

Column (1) splits the sample into counties that are outside the South (Panel A) and within the South (Panel C).[50] Column (2) divides counties into those without (Panel A) and those with (Panel C) a local NAACP chapter. The remaining columns split the sample into counties that are below (Panel B) and above (Panel D) the sample median of the Black Church membership rate in 1936 (column 3), distances from Pearl Harbor (column 4) and Germany (column 5), the number of years the state had been part of the United States (column 6), the share of Black men eligible to serve in WWII living in a household headed by a WWI veteran (column 7), and distance from the closest military base (column 8).

[50]Recall that we classify the following states as the South: Alabama, Arkansas, Florida, Kentucky, Louisiana, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia.

Only the estimates in columns (4) and (5) are statistically different from each other. They show that the effects of discrimination are larger in counties further away from Pearl Harbor and closer to Germany. Since the distance from Germany is negatively associated with distance from Pearl Harbor, both results suggest that the immediacy of danger from the Pearl Harbor attack moderated the discouragement effect of discrimination.

These estimates show that, with the exception of physical distance to Pearl Harbor, the effects of discrimination are fairly similar across the United States.

5.5 The Effect of Discrimination on Volunteer Characteristics

Table 8 examines the effect of discrimination on the characteristics of Black men who volunteered for the Army after Pearl Harbor. We estimate the baseline equation and examine the share of volunteers with the characteristic reported at the top of each column as outcomes. This analysis is restricted to the sample of counties and weeks where at least one man of each race volunteered. Thus, the sample size is much smaller than in the earlier analysis.

Column (1) shows that discrimination reduced the probability that Black volunteers completed high school. Since education was the main determinant of rank, this result is consistent with the finding that discrimination increased the probability that Black men were inducted as privates, the lowest rank in the Army (column 2). Columns (3) to (5) examine the industry of occupation of Black volunteers. We find that discrimination reduced the probability that Black volunteers worked in agriculture (column 3), and increased the probability that they worked in manufacturing (column 4) and clerical and services prior to enlisting (column 5). All estimates are statistically significant at the 1% or higher levels.

Taken together, these results indicate that discrimination reduced the probability that educated Black men or those working in agriculture volunteered. Black men who volunteered in high-discrimination counties were more likely to have been uneducated urban workers. The fact that educated men were more discouraged by discrimination is consistent with findings in Croke et al. (2016) and Larreguy and Marshall (2017) that educated individuals are more politically active (and thus resist joining to protest discrimination). It is also consistent with the possibility that educated Black men faced higher opportunity costs of joining the Army, which was likely to assign them to menial jobs.

6 Additional Results

6.1 All Races

To enrich our understanding of the role of discrimination in WWII military enlistment, we examine the patterns of volunteer enlistment for all other racial groups identified by the

NARA dataset. For consistency with the main analysis, we focus on the 48 mainland states during the eight weeks before and after Pearl Harbor.

Figure 3 plots volunteer enlistment rates for all races that our data allow us to identify – white, Black, Native American, Japanese, and Chinese.

That enlistment was the lowest for Black men is consistent with the fact that they probably faced the most severe discrimination during this period. Chinese and Japanese Americans faced similar and significant discrimination in U.S. society prior to the war.[51] But historians have argued that since the attack came from Imperial Japan, Japanese Americans may have volunteered at high rates during the early part of the war to prove their loyalty to the U.S. or to avoid retaliation.[52] Since the Chinese did not need to make such gestures, these perceptions are consistent with Chinese enlistment being in between Black and Japanese enlistment rates.

It is interesting to note that Native American enlistment rates after Pearl Harbor were similar to white (and Japanese) enlistment rates given the severe discrimination they had suffered. This is likely to be due to several factors. The first is economic. Native Americans had lower outside opportunities than white Americans, with median income of the former being only 25% of that of the latter (Sorkin, 1974). The second was social and political. Native American soldiers were not segregated or subject to different policies than white soldiers, and mainstream U.S. culture at the time, as reflected by outlets such as Hollywood films, promoted Native Americans as an embodiment of American identity across the country (Bernstein, 1986).

In summary, the relative increase in enlistment rates after Pearl Harbor seem consistent with the incentives faced by each group during this period.

In addition, we show that the discrimination measure used in our paper captures discrimination targeted at Black men. Appendix Table A.8 shows that the triple interaction coefficient was negative and statistically significant only for Black men. See Appendix D for more details.

6.2 Japanese Americans

In this section, we examine the enlistment behavior of Japanese Americans after they were first barred and then allowed to enter the Army.

Executive Order 9066, signed on February 19, 1942, authorized the forced internment of Japanese Americans. Army-directed "evacuations" began on March 24, 1942. People had six days notice to dispose of their property other than what they could carry, leading to

[51] See Soennichsen (2011) for a detailed discussion.

[52] Saavedra (2018) shows that Japanese-Americans born right after Pearl Harbor had more American sounding names, relative to kids born just a few days before, as Japanese-American parents responded to concerns about heightened anti-Japanese sentiments.

enormous economic losses. Anyone who was at least 1/16th Japanese was forcibly relocated. Between 110,000 and 120,000 people of Japanese ancestry were subject to forced internment, including approximately 80,000 second generation and third generation Americans, 17,000 children under ten years of age, as well as several thousand elderly and handicapped men and women.[53]

Internment was implemented rigorously on the U.S. mainland. However, in Hawaii, only 1,500 individuals of Japanese descent (approximately 0.9% of the Japanese American population in Hawaii) were sent to the mainland for internment. Broader internment of Japanese Americans, who comprised approximately 30% of total Hawaiian population, was seen as practically infeasible.

On February 1, 1943, President Roosevelt announced the creation of a segregated battalion comprised of Japanese American soldiers commanded by white officers to increase U.S. fighting capacity. With few exceptions, they were allowed to join only the Army and fought primarily in Europe. As with Black combat troops, Japanese American soldiers came to be known for exceptional bravery.[54]

We exploit the recruitment of Japanese American men for the military in 1943 together with variation in internment as another natural experiment for examining the effect of discrimination and disenfranchisement. The first cohort to be affected was inducted in March 1, 1943. We compare Japanese American enlistment before and after March 1, 1943, between Hawaii and the mainland.

To be eligible for selective service, loyalty questions were administered to all Japanese American men.[55] Only those who provided acceptable answers were inducted into the military. This conditionality gave Japanese American men discretion over whether they were drafted. Thus, the draft rate reflects the motivation to enlist.[56] For consistency with our

[53]The internment camps ended in 1945 following the Supreme Court decision, *Endo v. the United States*. It was ruled that the War Relocation Authority "has no authority to subject citizens who are concededly loyal to its leave procedure". The Supreme Court allowed Franklin Roosevelt to end internment one day before they publicly announced the decision.

[54]The most well-known is probably the 100th Infantry Division of the 442nd Infantry Regimental Combat Team. Because of the high rate of casualties the 100th Infantry Battalion sustained, it became known as the "Purple Heart Battalion". For its service during WWII, the 442nd (including the 100th prior to becoming part of it) received 21 Medals of Honor – America's highest military honor; in addition, it received 9,486 Purple Hearts, 8 Presidential Unit Citations, 559 Silver Stars, and 52 Distinguished Service Crosses among many other decorations. In 2012, the surviving members of the 442nd were made chevaliers of the French *Légion d'Honneur* for their actions, which contributed to the liberation of France during WWII and their heroic rescue of the Lost Battalion outside of Biffontaine (e.g. Congress, 1982; Kashima, 1997).

[55]The two most controversial "loyalty" questions were numbers 27 and 28. Question number 27 asked if second generation Japanese Americans (i.e. those born in the United States) were willing to serve in combat duty wherever they were ordered. Question number 28 asked if individuals would swear unqualified allegiance to the United States and forswear any form of allegiance to the Emperor of Japan. 17% of all registrants and approximately 20% of all second-generation Japanese Americans answered "No" to loyalty questions 27 and 28 (Lyon, 2012).

[56]This interpretation is consistent with that of historians. See, for example, Hayashi (2010), Muller (2007),

previous analysis, we restrict attention to the eight weeks before and after March 1, 1943.

Figure 4 plots Japanese-American enlistment rates over time for the mainland and Hawaii. It shows that enlistment was almost zero prior to March 1st, consistent with the fact that, with very few exceptions, Japanese Americans had been banned from service. After the policy change, there was a large spike in enlistment in Hawaii, but no noticeable change from the mainland. These patterns are consistent with Japanese Americans living in Hawaii, who faced less discrimination, being more willing to volunteer.

The reduction in enlistment in the last few weeks of the figure corresponds to the War Department's temporary pause in Japanese-American recruitment so that it could assess the causes of low mainland enlistment rates (Castelnuovo, 2008).

The descriptive patterns are consistent with the main result that disenfranchisement and discrimination discouraged volunteer enlistment.[57]

6.3 Later in 1942

To identify the impact of discrimination, the main analysis focuses on a narrow window of time during WWII. We are unable to provide a rigorous analysis of the later parts of 1942 because there were numerous varying factors that affected Black enlistment. However, given the high rate of overall Black volunteer enlistment in this latter period, it is important to examine and discuss the descriptive patterns.

Several months after Pearl Harbor, the U.S. government recognized the urgency of boosting Black enlistment rates and focused significant propaganda efforts on the Black community. Groups such as the NAACP and Black news outlets also began to promote the Double V campaign – the idea that victory abroad would lead to victory against racism at home. However, very little actually changed in the U.S. military, which remained segregated until 1948. Nevertheless, Black volunteer enlistment increased dramatically and overtook white volunteer enlistment by June, 1942.

Figure 5 plots Black volunteer enlistment rates in high and low discrimination counties until the U.S. army banned volunteering in December 1942. The increase in enlistment confirms historical accounts of Black patriotism during war. Black men were persuaded to join with very little real inducement. The cross-county comparison shows that the later surge in Black volunteer enlistment was driven by counties with relatively low discrimination, which

Omori (1999), Weglyn (1996).

[57] For comparison, Figure A.4 plots the analogous patterns for Chinese-Americans, who faced broadly similar degrees of formal and informal racial discrimination as Japanese Americans prior to WWII, but who were not the target of additional discrimination during the war. There were no anti-Chinese policies specific to the war period, and as many as 75% of Chinese Americans served with white units. Chinese-Americans exhibit no change in the mainland-Hawaii enlistment gap before and after March 1, 1943.

We do not have county-level measures of discrimination against the Japanese. Thus, we are unable to replicate the main analysis at the same level of granularity.

is consistent with our earlier finding of lower volunteer enlistment in high-discrimination areas. Understanding the determinants of Black enlistment in the latter part of 1942 is an important topic for future research.

7 Conclusion

This study shows that discrimination lowered Black volunteer enlistment at the onset of WWII. These findings help reconcile the ostensibly contradicting phenomena of low initial Black volunteer enlistment rates and the high degree of motivation and highly decorated service records shown by Black soldiers who served during the war.

Our findings show that discrimination can undermine an important dimension of state capacity, and that the social costs of discrimination can be far reaching. For policymakers, the implications of our results are clear: a state that requires equal contributions from its citizens should treat its citizens equally. This is an old idea dating back to the *social contract* on which all modern states are based. Our results are a sober reminder that the principle has not been applied to all citizens, even in critical moments when equality would have served the national public good.

The dynamic relationship between state capacity, war and inclusion/discrimination is complex. Our study shows that rigorous empirical analyses can be a promising direction for making progress on this agenda. Interesting avenues for future investigation include examining the effect of political inclusion or discrimination on outcomes such as tax compliance, draft compliance and voluntary public goods contributions. It would be particularly interesting to compare contexts where state capacity is a binding constraint for the government (e.g., war time) to contexts where it is not (e.g., peace time). The second is to understand the long-run consequences of WWII for racial discrimination, and in particular, political activism during Civil Rights. Evidence from other contexts (Becker et al., 2019; Weigel, 2020) suggests that Black participation during WWII could have led to increased political activism afterwards.

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Table 1: Summary Statistics

	Mean (1)	Std. Dev. (2)	Obs. (3)
Black Population Share	9.958	14.394	2,257
White Population Share	89.640	14.340	2,257
German Population Share	1.723	1.724	2,257
Italian Population Share	3.222	4.144	2,257
Japanese Population Share	0.043	0.150	2,257
Urban Population Share	63.898	32.308	2,257
Farmland (Share of Total County Area)	50.129	29.292	2,257
# Black Volunteers (per 100,000) after PH	8.639	33.337	2,257
South	4.855	15.490	1,245
Not South	18.490	56.988	1,012
# White Volunteers (per 100,000) after PH	46.239	25.795	2,257
South	46.226	35.055	1,245
Not South	46.244	21.864	1,012
Discrimination	-0.193	1.599	2,257

Notes: Observations are at the county level. The statistics are weighed by the 1940 population of eligible men of each race and county.

Table 2: The Correlates of Discrimination – County Level Variables

	Dependent Variable: Discrimination					
	(1)	(2)	(3)	(4)	(5)	(6)
	Panel A: Demographics					
	Black Population Share	White Population Share	German (Ancestry) Population Share	Italian (Ancestry) Population Share	Japanese (Ancestry) Population Share	Log Population
Coefficient of X (see col. heading)	5.351	-5.163	0.233	0.101	0.138	0.301
	(0.177)	(0.175)	(0.016)	(0.008)	(0.085)	(0.009)
Standardized Coefficient	[0.573]	[-0.552]	[0.153]	[0.107]	[0.020]	[0.205]
Observations	2,257	2,257	2,257	2,257	2,257	2,257
R-squared	0.807	0.804	0.75	0.745	0.728	0.823
Adjusted R-squared	0.803	0.8	0.745	0.739	0.722	0.82
Mean X	0.010	0.896	1.723	3.223	0.094	5.735
Std. Dev. X	0.144	0.143	1.724	4.144	0.351	2.228
	Panel B: NAACP, Church and Veteran Status					
	NAACP	Black Church Members	Black WWI Veterans as a Share of Eligible Men	Share of WWII Eligible Black Men Living with WWI Vet	Household Head Veteran	Non-Household Head Veteran
Coefficient of X (see col. heading)	0.108	1.401	-1.166	-0.060	2.321	-0.178
	(0.087)	(0.539)	(0.473)	(1.813)	(0.914)	(0.799)
Standardized Coefficient	[0.017]	[0.071]	[-0.075]	[-0.002]	[0.099]	[-0.008]
Observations	2,257	2,257	2,238	2,249	2,249	2,249
R-squared	0.745	0.746	0.746	0.745	0.745	0.745
Adjusted R-squared	0.74	0.74	0.74	0.739	0.740	0.739
Mean X	0.194	0.076	0.130	0.012	0.063	0.040
Std. Dev. X	0.395	0.039	0.047	0.014	0.026	0.034
	Panel C: WWII, New Deal expenditure and Geography					
	WWII Spending per capita (1,000 Dollars)	New Deal Agricultural Grants per capita (1,000 Dollars)	New Deal - Other Grants per capita (1,000 Dollars)	Distance from Pearl Harbor (1,000 km)	Distance from Germany (1,000 km)	Distance from Japan (1,000 km)
Coefficient of X (see col. heading)	0.155	-7.243	3.026	1.104	-0.089	1.203
	(0.028)	(0.537)	(0.168)	(0.132)	(0.161)	(0.126)
Standardized Coefficient	[0.074]	[-0.270]	[0.197]	[0.566]	[-0.034]	[0.499]
Observations	2,257	2,257	2,257	2,257	2,257	2,257
R-squared	0.731	0.748	0.762	0.736	0.727	0.738
Adjusted R-squared	0.725	0.743	0.757	0.73	0.721	0.732
Mean X	0.588	0.023	0.216	6.946	7.283	10.39
Std. Dev. X	0.666	0.039	0.123	1.109	0.854	0.764

Notes: Observations are at the county level. In Panel C column (2), "New Deal - Other Grants per capita" includes grants from the Relief Expenditure Program, Public Work Program, and Housing Loans and Insurance Program. All regressions control for state fixed effects. All regressions are weighed by the 1940 population of eligible men of each race and county. Standardized coefficients are reported in brackets.

Table 3: The Correlates of Discrimination – County-Race Specific Variables

	Dependent Variable: Discrimination						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	X=Age	X=Years of Education	X=Share in Labor Force	X=Share Employed	X=Log Occupational Income Score	X=Share Employed in Manufacturing	X=Share Employed in Farming
	Panel A. Black						
Coefficient of X (see col. heading)	0.094	0.192	1.479	0.687	1.315	0.559	-0.930
	(0.01)	(0.018)	(0.209)	(0.207)	(0.130)	(0.204)	(0.216)
Standardized Coefficient	[0.252]	[0.216]	[0.092]	[0.049]	[0.147]	[0.037]	[-0.045]
Observations	2,257	2,257	2,257	2,257	2,257	2,257	2,257
R-squared	0.753	0.757	0.750	0.745	0.755	0.745	0.746
Adjusted R-squared	0.748	0.752	0.744	0.740	0.750	0.739	0.741
Mean X	27.50	7.386	0.890	0.807	2.833	0.157	0.127
Std. Dev. X	2.756	1.648	0.074	0.101	0.172	0.097	0.112
	Panel B. White						
Coefficient of X (see col. heading)	0.120	0.301	1.882	-0.592	3.878	2.273	-8.103
	(0.01)	(0.017)	(0.516)	(0.455)	(0.128)	(0.182)	(0.318)
Standardized Coefficient	[0.320]	[0.339]	[0.117]	[-0.042]	[0.433]	[0.151]	[-0.396]
Observations	2,257	2,257	2,257	2,257	2,257	2,257	2,257
R-squared	0.705	0.725	0.689	0.688	0.779	0.708	0.758
Adjusted R-squared	0.698	0.719	0.683	0.681	0.775	0.702	0.753
Mean X	31.43	10.66	0.895	0.817	3.198	0.241	0.057
Std. Dev. X	2.624	1.216	0.035	0.048	0.139	0.125	0.061

Notes: Observations are at the county level. All regressions control for state fixed effects, and are weighed by the 1940 population of eligible men in each county and race. Standardized coefficients are reported in brackets.

Table 4: The Effect of Discrimination on Black Volunteer Enlistment

	Dependent Variable: # Volunteers per 100,000 Eligible Men					
	(1)	(2)	(3)	(4)	(5)	(6)
					Baseline	
Discrimination x Black x Post	-2.088	-1.984	-2.044	-3.147	-2.793	-2.793
	(0.620)	(0.623)	(0.627)	(0.601)	(1.178)	(1.178)
Discrimination x Black	-0.038	-1.805	-1.809			
	(0.456)	(0.658)	(0.659)			
Black x Post	-13.218	-13.557	-13.557			
	(1.172)	(1.189)	(1.193)			
Black	-11.86	-10.039	-10.002			
	(0.709)	(0.843)	(0.845)			
Controls:						
State FE	Y	N	N	N	N	N
County FE	N	Y	Y	N	N	N
Week FE	N	N	Y	N	N	N
County-Week FE	N	N	N	Y	Y	Y
Race-Week FE	N	N	N	Y	Y	Y
Race-County FE	N	N	N	Y	Y	Y
County-Race Controls (see notes) x Week FE	N	N	N	N	Y	Y
County-Race-Week Draft Rate	N	N	N	N	N	Y
Observations	70,744	70,744	70,744	70,744	70,744	70,744
R-squared	0.225	0.335	0.428	0.822	0.823	0.823
Adjusted R-squared	0.224	0.313	0.409	0.591	0.592	0.592
Mean Y	30.360	30.360	30.360	30.360	30.360	30.360
Std. Dev. Y	38.061	38.061	38.061	38.061	38.061	38.061

Notes: Observations are at the race, county and week level. In columns (5) and (6), the county-race controls from the U.S. 1940 Census are the county-race average of: labor force participation, employment, education, age, occupational income scores, the share of employment in manufacturing and farming, population size, and past migration rates. åThe regressions include all lower order interaction terms and are weighed by the 1940 population of eligible men in each county and race. Standard errors are clustered at the county level.

Table 5: The Effect of Discrimination on Black Volunteer Enlistment – Robustness to Controlling for Black Organizations, Distance to the War, and Years in the U.S.

	Dependent Variable: # Volunteers per 100,000 Eligible Men						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Discrimination x Black x Post	-2.793	-2.745					-2.181
	(1.178)	(1.178)					(1.118)
Black x Post x NAACP			7.608				5.309
			(2.150)				(2.512)
Black x Post x Black Church			-5.811				-7.290
			(11.419)				(11.868)
Black x Post x Dist. Pearl Harbor				-2.567			0.302
				(3.414)			(3.125)
Black x Post x Dist. Germany				-7.038			0.511
				(3.506)			(3.848)
Black x Post x Dist. Military Base					-0.009		-0.003
					(0.016)		(0.017)
Black x Post x Years Union						0.104	0.104
						(0.048)	(0.048)
Observations	70,744	60,896	60,896	60,896	60,896	60,896	60,896
R-squared	0.823	0.852	0.852	0.852	0.851	0.852	0.852
Adjusted R-squared	0.592	0.658	0.658	0.658	0.658	0.658	0.658
Mean Y	30.360	28.972	28.972	28.972	28.972	28.972	28.972
Std. Dev. Y	38.061	35.537	35.537	35.537	35.537	35.537	35.537

Notes: Observations are at the race, county and week level. All regressions include county-week fixed effects, race-week fixed effects, and week fixed effects x county-race variables from the U.S. 1940 Census: labor force participation, employment, education, age, occupational income scores, the share of employment in manufacturing and farming, population size, and past migration rates. The regressions include all lower order interaction terms and are weighed by the 1940 population of eligible men in each county and race. Standard errors are clustered at the county level.

Table 6: The Effect of Discrimination on Black Volunteer Enlistment – Robustness to Controlling for WWI Veteran Presence

	Dependent Variable: # Volunteers per 100,000 Eligible Men					
	(1)	(2)	(3)	(4)	(5)	(6)
Discrimination x Black x Post	-2.793	-2.783			-2.563	-2.751
	(1.178)	(1.178)			(1.169)	(1.152)
Share of Black WWI Veterans x Black x Post			-35.989		-24.045	
			(26.736)		(25.927)	
Share Living with Black WWI Veteran x Black x Post			190.129		146.128	
			(91.679)		(87.200)	
Share Living with Black WWI Veteran head x Black x Post				24.480		35.714
				(37.527)		(38.267)
Share Living with Black WWI Veteran non-head x Black x Post				26.434		12.897
				(29.509)		(29.099)
Observations	70,744	70,088	70,088	70,088	70,088	70,088
R-squared	0.823	0.822	0.822	0.822	0.822	0.822
Adjusted R-squared	0.592	0.590	0.590	0.590	0.590	0.590
Mean Y	30.360	30.344	30.344	30.344	30.344	30.344
Std. Dev. Y	38.061	37.994	37.994	37.994	37.994	37.994

Notes: Observations are at the race, county and week level. All regressions include county-week fixed effects, race-week fixed effects, and week fixed effects x county-race variables from the U.S. 1940 Census: labor force participation, employment, education, age, occupational income scores, the share of employment in manufacturing and farming, population size, and past migration rates. The regressions include all lower order interaction terms and are weighed by the 1940 population of eligible men in each county and race. Standard errors are clustered at the county level. See Appendix B for more details on the construction of WWI Veterans.

Table 7: The Effect of Discrimination on Black Volunteer Enlistment – Heterogeneous Effects

	Dependent Variable: # Volunteers per 100,000 Eligible Men							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	X=South	X= NAACP Chapter in 1940	X=Black Church in 1936	X=Distance to Pearl Harbor	X=Distance to Germany	X=Years in the Union	X=WWI Vet HH Head	X=Distance from closest Military Base
	Panel A. X=0		**Panel B. X < Median Values**					
Discrimination x Black x Post [1]	-2.209	-2.415	-4.662	0.352	-4.907	-2.239	-3.318	-2.419
	(2.208)	(1.311)	(2.772)	(1.875)	(1.602)	(1.370)	(1.770)	(1.805)
Observations	30,964	64,268	29,760	34,036	35,744	35,484	34,476	36,220
R-squared	0.792	0.799	0.828	0.821	0.824	0.815	0.700	0.876
Adjusted R-squared	0.516	0.536	0.601	0.584	0.593	0.570	0.304	0.714
Mean X	-0.005	0.196	-0.007	0.138	0.036	0.086	0.264	0.092
Std. Dev. X	0.125	0.749	0.123	0.675	0.325	0.505	0.865	0.529
	Panel C. X=1		**Panel D. X > Median Values**					
Discrimination x Black x Post [2]	-1.570	-2.371	-2.338	-4.391	-0.127	-0.685	-2.183	-2.411
	(1.423)	(2.548)	(1.278)	(1.156)	(1.479)	(1.544)	(1.526)	(1.228)
Observations	39,780	6,476	31,136	36,708	35,000	35,260	36,052	34,524
R-squared	0.874	0.914	0.880	0.826	0.824	0.835	0.898	0.764
Adjusted R-squared	0.708	0.792	0.722	0.597	0.592	0.615	0.763	0.453
Mean X	0.377	-0.008	0.283	0.091	0.260	0.124	0.058	0.145
Std. Dev. X	0.998	0.124	0.882	0.514	0.889	0.628	0.440	0.680
			Panel E. Difference in Coefficients -- Panel A vs. Panel B					
[1] − [2] p-value	0.8595	0.997	0.4792	0.019	0.0416	0.4683	0.638	0.9974

Notes: Observations are at the race, county and week level. Sample restrictions are stated in the column headings (X is the variable with which the sample is cut). All regressions include county-week fixed effects, race-week fixed effects, and week fixed effects x county-race variables from the U.S. 1940 Census: labor force participation, employment, education, age, occupational income scores, the share of employment in manufacturing and farming, population size, and past migration rates. The regressions include all lower order interaction terms and are weighed by the 1940 population of eligible men in each county and race. Standard errors are clustered at the county level. See Appendix B for more details on the construction of WWI Veterans.

Table 8: Effects of Discrimination on Characteristics of Volunteers

	Dependent Variable: Share of Volunteers with the Characteristic Below				
			Worked in the Sector		
	Completed High school	Inducted as Private Grade	Agriculture	Manufacturing	Clerical & Services
	(1)	(2)	(3)	(4)	(5)
Discrimination x Black x Post	-0.549	0.451	-0.115	0.432	0.765
	(0.225)	(0.043)	(0.043)	(0.255)	(0.154)
Observations	1,082	1,082	1,082	1,082	1,082
R-squared	0.897	0.970	0.869	0.850	0.817
Adjusted R-squared	0.289	0.794	0.090	-0.040	-0.267
Mean X	0.074	0.074	0.074	0.074	0.074
Std. Dev. X	0.525	0.525	0.525	0.525	0.525

Notes: Observations are at the race, county and week level. All regressions include county-week fixed effects, race-week fixed effects, and week fixed effects x county-race variables from the U.S. 1940 Census: labor force participation, employment, education, age, occupational income scores, the share of employment in manufacturing and farming, population size, and past migration rates. The regressions include all lower order interaction terms and are weighed by the 1940 population of eligible men in each county and race. Standard errors are clustered at the county level.

Figure 1: Black and White Enlistment from Counties with High and Low Discrimination

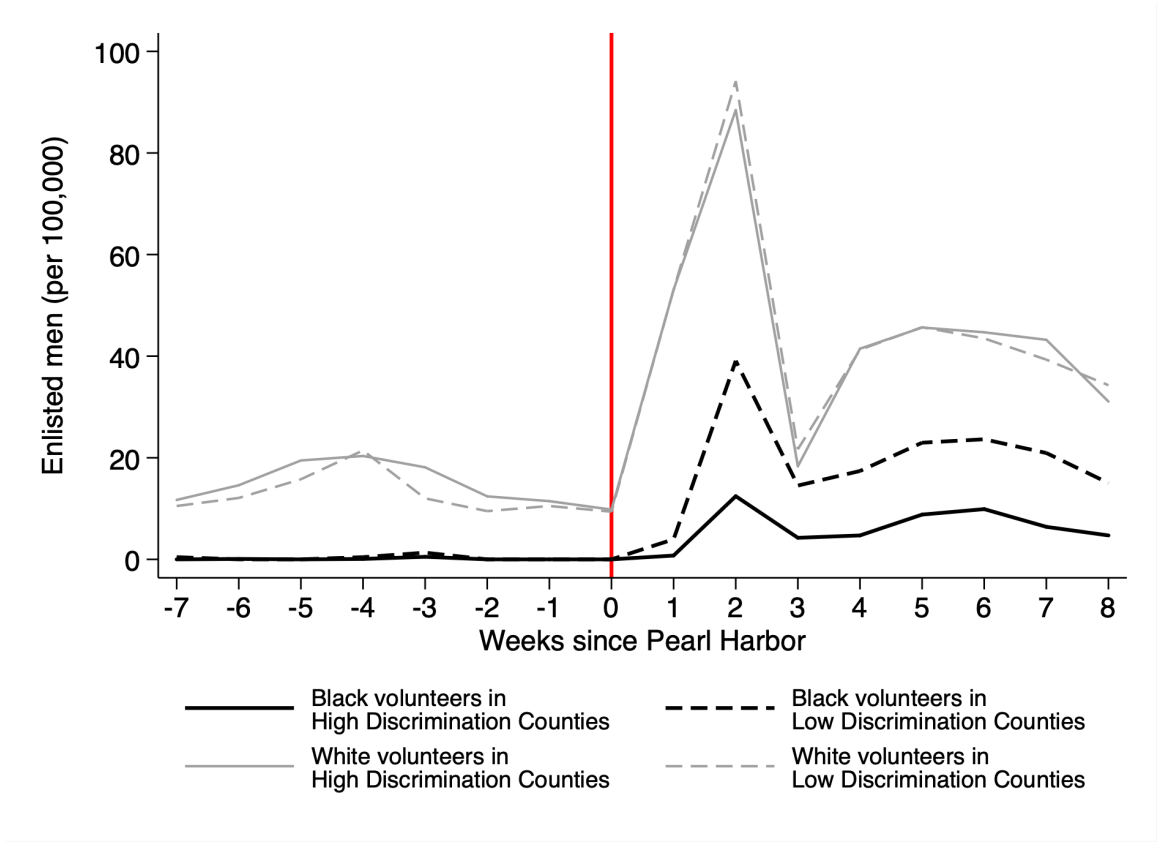
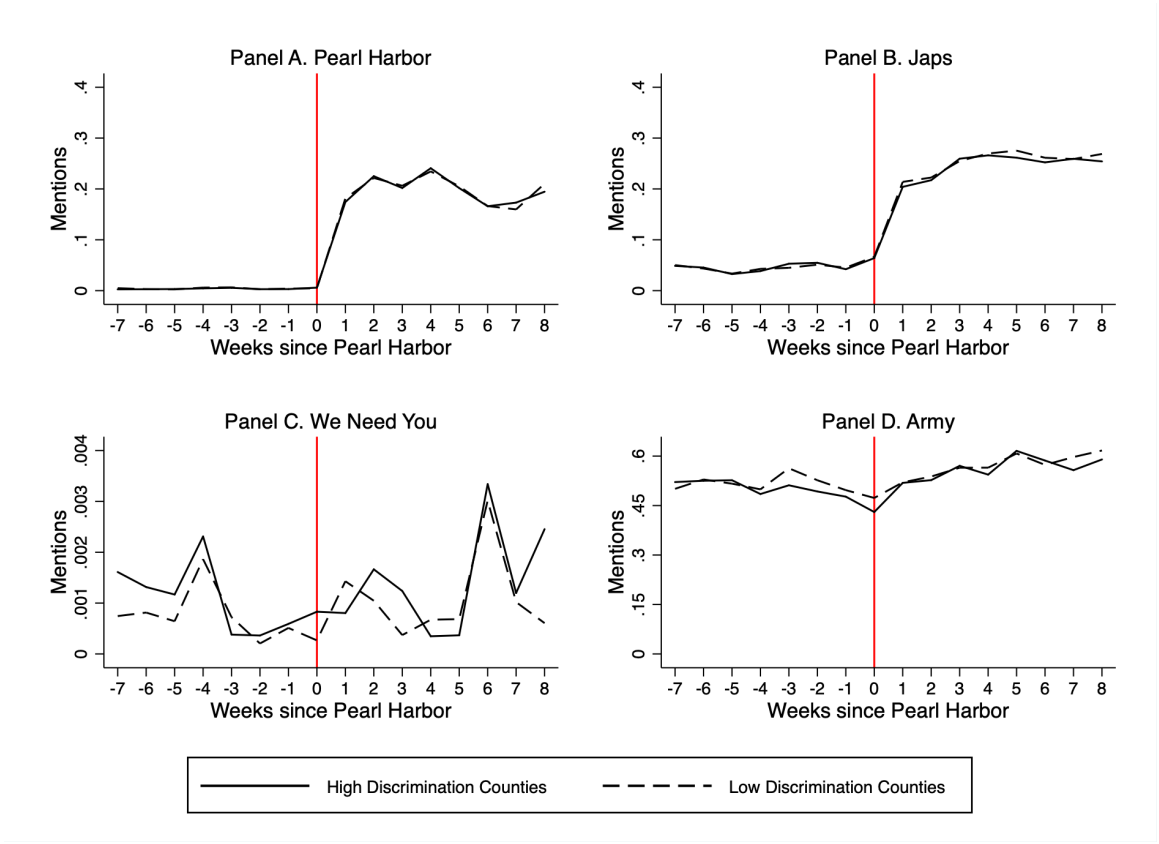


Figure 2: Share of News Coverage About the War in Local Newspapers



Notes: The figure reports the mentions in local newspapers of each term specified in the title of each panel, for counties with discrimination above (solid line) and below (dashed line) median discrimination. To normalize by the total length of each paper, the number of mentions is normalized by the number of pages containing the word "and".

Figure 3: Volunteer Enlistment for All Races

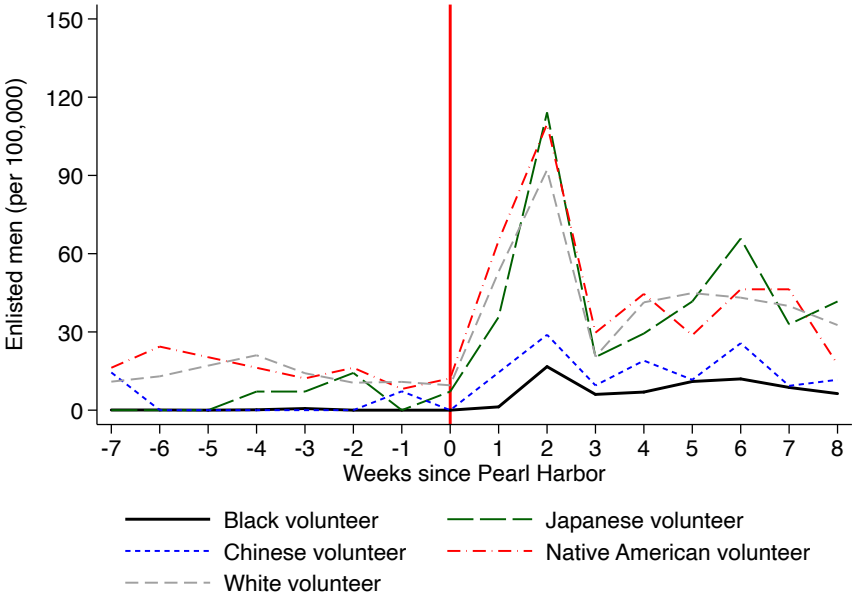


Figure 4: Japanese American Enlistment on the Mainland and Hawaii

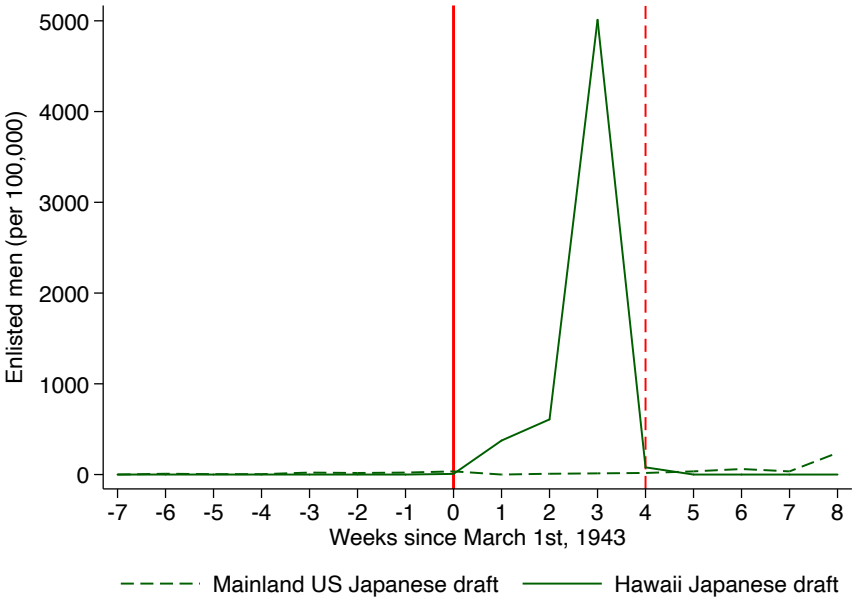
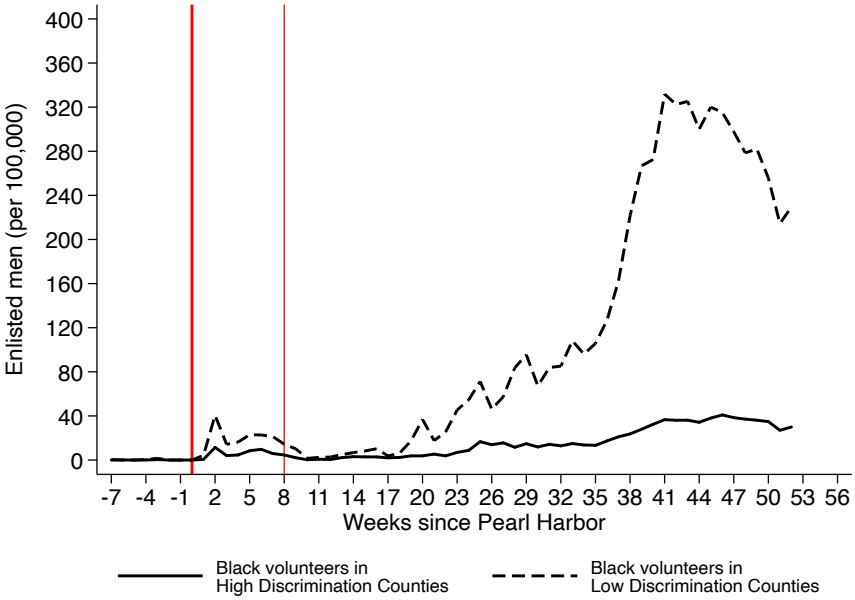


Figure 5: Black Volunteer Enlistment until Volunteering was Banned



Appendix

A Racial Discrimination at the Onset of WWII

The pervasive racial discrimination prevailing in the U.S. at the onset of WWII had been going on for decades. Starting from the late 1890s, many Southern states passed laws intended to disenfranchise the Black population (Woodward, 2002). Racial segregation meant that the Black population had access to fewer and lower quality public and private goods (e.g., police protection, restaurants, schools, water fountains, buses). Interracial marriages and sometimes even non-marital sexual relationships were made illegal (Packard, 2003).

Discrimination was often exercised informally by organizations such as the Ku Klux Klan, and more generally by coordinated actions of the white community. Between 1882 and 1968, as many as 3,446 Black Americans were lynched (Tuskegee Institute, 2020). Black men and women were excluded from most non-menial jobs (Sharfstein, 2011).

There was substantial geographical variation in the degree of discrimination. Discrimination was not isolated to the South. For example, between 1913 and 1948, 30 out of the then 48 states enforced anti-miscegenation (mixed-race marriage) laws (Vile, 2003). Many schools in Illinois, Ohio, Pennsylvania, and New Jersey were completely segregated, even though it was *de jure* illegal. Similarly, white residents *de facto* enforced racial residential segregation in most northern and Western cities (Shertzer and Walsh, 2019).

Black workers benefitted very little from war industries relative to white workers, especially during the early part of the war that we study. For example, in January 1942, only 25% of the heads of several hundred companies that held war contracts stated in a U.S. Employment Service survey that they planned to hire Black workers. 51% stated that they did not plan then or in the future to ever employ Black workers. Half of the 282,245 job openings in war industries were not open to Black applicants as a matter of policy. Similarly, among the 1,630 defense job training courses financed by a $60 million fund appropriated by Congress in 1940, only 194 accepted Black applicants. In 1942, Black individuals accounted for only 0.7% of essential war production workers. In 1943, it had only risen to 1.3% (Davis, 1955).

B Data

B.1 Discrimination Validation

We validate our measure of discrimination by examining its correlation with other known proxies for discrimination. Our composite discrimination measure is constructed using all variables that reflect discrimination at the county level and are available for the entire nation.

Thus, our validations measures are variables that vary at the county level and which are not available for the entire nation. First, we consider the 1948 vote share for Strom Thurmond, a renowned segregationist who in his bid for president, boasted that "there's not enough troops in the army to force the Southern people to break down segregation and admit [Black residents] into our theaters, into our swimming pools, into our homes, and into our churches". Second, we derive a summary measure of racial inequality in school quality as of 1940 in the spirit of Carruthers and Wanamaker (2017). As in the latter paper, we restrict attention to the Southern states for which data are available and compute the average inequality across different school inputs between Black and white schools.[58]

We test whether our index correlates with these "external" proxies for segregation and discrimination. Appendix Figure A.2 plots the relationship between the index of discrimination (on the x-axis) and, respectively, Thurmond vote share (left panel) and school inequality (right panel), after demeaning by state fixed effects.[59] Reassuringly, the index of discrimination is positively correlated with both external proxies for segregation – a correlation that, in both cases, is statistically significant at the 1% level.

B.2 NAACP, Black Church, WWI Veteran Data

Data on the local presence of NAACP chapters are from Gregory and Estrada (2019). See also Calderon et al. (2019) for a detailed description of these data. We measure NAACP presence as an indicator variable equal to one if a county had at least one NAACP chapter between 1919 and 1940. Membership in Black churches is the share of the county population that has membership in a Black church in 1936, as measured in the Census of Religious Bodies. WWI veteran is reported in the 1930 (and not in the 1940) census. The share of Black WWI veterans is computed relative to the (Black) eligible population. We follow Mazumder (2019) and Campante and Yanagizawa-Drott (2015) and use age in 1930 to predict whether a man is eligible to serve in WWI.

As discussed in the paper, we construct different proxies for the presence of Black WWI veterans – both in the county and in the household. To compute these variables we rely on the 1930 U.S. Census (rather than on the 1940 one), because only in this year WWI veteran status was asked.[60] Similar to Mazumder (2019), we proceed in steps. First, we calculate, for each Black man in the U.S. Census of 1930, his age in 1917. We then count the number

[58] Data on Black and white schools are available for the following states: Alabama, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, and Texas. Both Thurmond vote share and the measure of racial school inequality are available only for a subset of counties in our sample. Since we use all of the variables that are available at the county level for the entire country, the validation variables will necessarily be available for a subset of counties.

[59] For consistency with our main analysis, we weigh the regressions by the number of eligible individuals in each county.

[60] The 1940 Census asked a generic question about veteran status without, however, specifying the conflict.

of Black men according to two eligibility groups: (1) age 21-31 in 1917, and (2) age 18-45 in 1917.[61] Second, we count the number of WWI Black veterans by county. We generate the share of WWI Black veterans in 1930 by scaling the number of veterans by the number of "eligible" individuals, according to both eligibility criteria (i.e., 21-31 and 18-45). We use the wider (18-45) age range eligibility criterion, but results are similar when using the more stringent (21-31) one. We also construct the share of Black men who, given their age in 1930, would have been eligible to serve in WWII and were living in a household with a WWI veteran. In addition, we split the latter variable for individuals who were living with a WWI veteran who was household head and who was not the household head, respectively.

Note that our proxy for WWI Black veterans is built under the assumption that Black individuals living in a given county in 1930 were still residing in that same county at the time of the Pearl Harbor attack. While this assumption may not hold in practice, Black Americans' geographic mobility should add noise to our results, unless it was systematically correlated with both WWI veteran shares and patterns of Black individuals' volunteering behavior during WWII. We use the 1930 and 1940 censuses to examine Black migration rates and find no evidence for this concern..

C Additional Sensitivity Tests

C.1 Mismeasurement and Spatially Correlated Standard Errors

In Appendix Table A.5, we first check that the baseline is robust to controlling for lagged Black draft enlistment rate instead of the contemporaneous measure (column 2). This is motivated by anecdotal accounts from WWI that local conscription depended on local volunteer enlistment Murray (1971). We are not aware of this being true for WWII, but we conduct this check out of an abundance of caution. In column (3), we address the concern that our effects may partly capture race misclassification. This could be an active choice for Black men who "passed for white" to escape discrimination, or an enumeration mistake on the part of the Army recruiter who may mistake mixed race men for white.[62] We address this potential issue by controlling for the county-specific rates of race change from Black to white in the 1930 and 1940 U.S. population censuses estimated by Dahis et al. (2019)

[61] The choice of these two eligibility groups is motivated by the draft requirements. The first draft (June 5, 1917) included all men between the ages of 21 and 30. The second draft (June 5, 1918) registered men who attained age 21 after June 5, 1917. A supplemental registration, included in the second registration, was held on August 24, 1918, for men turning 21 after June 5, 1918. Finally, a third registration was held on September 12, 1918, for men age 18 through 45. See Mazumder (2019) and Campante and Yanagizawa-Drott (2015) for more details on the WWI draft.

[62] The U.S. legally defined Black to be a person with any degree of African extract. Thus, mixed race men were Black, and some of them had appearances similar to white men. See Dahis et al. (2019) for a detailed discussion.

interacted with the Black and the post-Pearl Harbor dummy variable.[63] In column (4), we replicate the analysis by omitting the states for which Army boards did not receive complete information from Service Command 7 (see Section 3). The triple interaction coefficients are statistically precise and similar in magnitude to the baseline.[64]

In columns (5) and (6), we consider the possibility of spatially correlated errors. We estimate alternative standard errors using the Conley adjustment with spatial cutoffs of 2,000km or 3,000km. In column (7) we cluster standard errors at the commuting zone rather than county level. The triple interaction is statistically significant at the 1% level with all of the adjustments.

C.2 Outliers

In Appendix Table A.6, we examine the sensitivity of our estimates to outliers. In column (2), we omit outliers as defined by Cook's Distance. In columns (3) and (4), we estimate the baseline specification on a sample where we omit observations with the highest and lowest 1% values of volunteer rates and discrimination. In columns (5) and (6), we winsorize these observations instead of omitting them. The estimates are statistically similar to the baseline sample, which is re-stated in column (1).

C.3 Distance to Locations of Historical Importance

Appendix Table A.7 presents our baseline coefficient in column (1) to ease comparisons. In columns (2) and (3), we consider distance from Tuskegee and from Tulsa.[65] In column (4), we consider the distance from the closest city where a 48er settled.[66] In column (5), we control for the distance from the closest Black refugee camp established during the Civil War.[67] Reassuringly, in all cases, the coefficient of interest remains negative, statistically significant, and close to our baseline (reported in column 1 to ease comparisons).

[63] The number of observations is slightly different due to the limited availability of the additional control.

[64] The estimate in column (2) is nearly identical if we control for the draft rate lagged by two or more weeks. They are available upon request.

[65] In June 1941, the 99th Pursuit Squadron, the first African American U.S. Army Air Force, was moved to Tuskegee, where its personnel received the initial training. One may thus conjecture that proximity to Tuskegee may be associated with stronger willingness to volunteer within the Black community. On the other hand, in counties closer to Tulsa, memories of the 1921 massacre may have reduced propensity to enlist among Black men (Albright et al., 2021).

[66] Dippel and Heblich (2021) document that the historical presence of (emigrated) leaders of the failed 1848-1849 German revolution is associated with stronger support for racial equality in the long run, possibly influencing Black Americans' incentives to volunteer.

[67] Ramos-Toro (2021) finds that refugee camps, established during the Civil War, were conducive to the development of racially-progressive politics, which also persisted over time.

D The Effect of Discrimination on the Enlistment Rate of Other Races

Appendix Table A.8 presents the baseline estimates with other races. In column (1), we restate the earlier estimate for Black enlistment. Column (2) shows that the triple interaction coefficient changes little when we omit the migration controls. This omission is necessary for when we examine the other races because of data limitations. Column (3) examines the effect of discrimination on Japanese enlistment rates. This is a sample of county-week observations for white and Japanese American men. There are fewer observations because the Japanese American population was much smaller than the Black population and geographically concentrated along the West coast states. Columns (4) and (5) examine the effect of discrimination on Chinese and Native American enlistment. These results indicate that our discrimination measure captures discrimination specifically targeted towards Black Americans. They also suggest that there were no cross-race spillovers for our measure of discrimination.

Table A.1: Main Variables

Variable	Description	Source
Volunteers	Volunteers per 100,000 individuals eligible to serve in the county-week	World War II Army Enlistment Records (NARA-AAD), 1938-1946
Draftees	Draftees per 100,000 individuals eligible to serve in the county-week	World War II Army Enlistment Records (NARA-AAD), 1938-1946
Net Migration '30-'40	Net Migration Rate in % between 1930 and 1940	Authors' calculation from 1940 Census Ruggles et al. (2020)
Black Church Membership 1936	Number of members of African American churches relative to county population in 1936	Census of Religious Bodies
Presence of NAACP Chapter 1940	Presence of NAACP Chapter in 1940	Gregory and Estrada (2019)
Distance from Japan (km)	Distance to Japan in km. from county centroids	Authors' calculation
Distance from PH (km)	Distance to Pearl Harbor in km from county centroids	Authors' calculation
Distance from Germany (km)	Distance to Germany in km from county centroids	Authors' calculation
Distance from closest Military Base (km)	Distance to the closest Military Base in km from county centroids	Authors' calculation
WWII spending per capita	Total Government spending for WWII, including expenses for contracts and facilities, in U.S., per capita.	County and City Data Books (ICPSR Study 7735)
New Deal Agricultural Grants per capita	Total per capita amount of New Deal Relief loans and grants provided by the Agricultural Adjustment Administration, the Farm Credit Administration, the Farm Security Administration, and the Rural Electrification Administration.	Fishback et al. (2003)
New Deal (NON-repayable) per capita	Total per capita amount of New Deal Relief grants and public works grants; loans provided by the Reconstruction Finance Corporation, the Home Owners Loan Corporation, the Farm Housing Administration (insured loans), and the U.S. Housing Administration	Fishback et al. (2003)

Notes: Variables used in the paper but not described here or in other tables are calculated from the 1940 U.S. Census (Ruggles et al. 2020).

Table A.2: Summary Statistics - Individual Level

	All counties			High Discrimination			Low Discrimination		
	Mean	Std. Dev	Obs	Mean	Std. Dev	Obs	Mean	Std. Dev	Obs
Panel A. Full Sample									
Volunteers	0.412	0.492	266,545	0.39	0.488	133,062	0.434	0.496	133,483
Draftees	0.588	0.492	266,545	0.61	0.488	133,062	0.566	0.496	133,483
Black	0.061	0.239	266,545	0.1	0.3	133,062	0.022	0.147	133,483
White	0.939	0.239	266,545	0.9	0.3	133,062	0.978	0.147	133,483
At Least High School Degree	0.522	0.5	266,545	0.497	0.5	133,062	0.546	0.498	133,483
In agriculture	0.083	0.275	266,545	0.092	0.289	133,062	0.073	0.26	133,483
In manufacturing	0.557	0.497	266,545	0.509	0.5	133,062	0.605	0.489	133,483
In Service and Clerical Occupations	0.228	0.42	266,545	0.257	0.437	133,062	0.199	0.399	133,483
At Least Some High School	0.786	0.41	266,545	0.771	0.42	133,062	0.801	0.4	133,483
In Private Grade	0.939	0.24	266,545	0.931	0.253	133,062	0.946	0.226	133,483
Age	23.622	3.097	266,440	23.659	3.113	133,009	23.585	3.081	133,431
Panel B. Black Men									
Volunteers	0.125	0.33	16,230	0.115	0.319	13,260	0.168	0.374	2,970
Draftees	0.875	0.33	16,230	0.885	0.319	13,260	0.832	0.374	2,970
At Least High School Degree	0.218	0.413	16,230	0.2	0.4	13,260	0.296	0.457	2,970
In agriculture	0.124	0.329	16,230	0.145	0.352	13,260	0.031	0.172	2,970
In manufacturing	0.594	0.491	16,230	0.573	0.495	13,260	0.686	0.464	2,970
In Service and Clerical Occupations	0.229	0.42	16,230	0.229	0.42	13,260	0.23	0.421	2,970
At Least Some High School	0.515	0.5	16,230	0.482	0.5	13,260	0.659	0.474	2,970
In Private Grade	0.989	0.106	16,230	0.988	0.11	13,260	0.993	0.086	2,970
Age	23.636	3.011	16,221	23.576	3.011	13,252	23.902	2.998	2,969
Panel C. White Men									
Volunteers	0.431	0.495	250,315	0.421	0.494	119,802	0.421	0.494	119,802
Draftees	0.569	0.495	250,315	0.579	0.494	119,802	0.579	0.494	119,802
At Least High School Degree	0.541	0.498	250,315	0.53	0.499	119,802	0.53	0.499	119,802
In agriculture	0.08	0.271	250,315	0.087	0.281	119,802	0.087	0.281	119,802
In manufacturing	0.555	0.497	250,315	0.502	0.5	119,802	0.502	0.5	119,802
In Service and Clerical Occupations	0.228	0.42	250,315	0.261	0.439	119,802	0.261	0.439	119,802
At Least Some High School	0.804	0.397	250,315	0.803	0.398	119,802	0.803	0.398	119,802
In Private Grade	0.935	0.246	250,315	0.925	0.264	119,802	0.925	0.264	119,802
Age	23.621	3.103	250,219	23.669	3.124	119,757	23.669	3.124	119,757

Notes: The data are reported in the Army induction cards. See the World War II Army Enlistment Records (NARA-AAD), 1938-1946.

Table A.3: Description of Discrimination Components

Variable Name	Description	Source
President Vote Share Democrat 1900-1930	Average vote share in Presidential elections, for each election between 1900 and 1930.	Clubb et al. (1990)
Congress Vote Share Democrat 1900-1930	Average vote share in Congressional electionsl, for each election between 1900 and 1930.	Clubb et al. (1990)
Presence of KKK	Dummy = 1 if the KKK is present any year between 1915 and 1940.	Kneebone and Torres (2015)
Number of Lynching cases up to 1939	Total # of lynchings of Black individuals between 1803 and 1939.	Monroe Work Today (MWT)
Dissimilarity Index 1940	The evenness of which Black and white individuals are distributed across areas.	Logan and Parman (2017)
Isolation Index 1940	The extent to which Black and white individuals are exposed to each other.	Logan and Parman (2017)
Segregation Index 1940	Likelihood of interracial interaction in residential communities.	Logan and Parman (2017)
White-Black Wage Gap 1940	Difference in average positive wage for white and Black Americans in 1940.	Author's computation, 1940 U.S. Census

Notes: The table presents the variables used to construct the discrimination principal component measure used in the main analysis. All variables are measured at the county level.

Table A.4: The Effect of Discrimination on Black Volunteer Enlistment – Individual Component Measures of Discrimination

	Dependent Variable: # Volunteers per 100,000 Eligible Men							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Black x Post x President Vote Share Democrat 1900-1930	-0.176							
	(0.076)							
Black x Post x Congress Vote Share Democrat 1900-1930		-0.205						
		(0.055)						
Black x Post x Presence of KKK			-4.920					
			(1.930)					
Black x Post x Number of Lynching up to 1939				-0.087				
				(0.185)				
Black x Post x Dissimilarity Index 1940					-3.696			
					(5.312)			
Black x Post x Isolation Index 1940						-3.855		
						(3.828)		
Black x Post x Segregation Index 1940							-6.357	
							(4.864)	
Black x Post x Diff. Wage 1940								-0.010
								(0.006)
Observations	70,744	70,744	70,744	70,744	70,744	70,744	70,744	70,744
R-squared	0.823	0.823	0.823	0.823	0.823	0.823	0.823	0.823
Adjusted R-squared	0.592	0.592	0.592	0.592	0.592	0.592	0.592	0.592
Mean X	4.164	4.876	0.044	0.303	0.037	0.023	0.045	38.91
Std. Dev. X	16.55	19.49	0.205	2.031	0.152	0.105	0.173	155.3

Notes: Observations are at the race, county and week level. All regressions include county-week fixed effects, race-week fixed effects, and week fixed effects x county-race variables from the U.S. 1940 Census: labor force participation, employment, education, age, occupational income scores, the share of employment in manufacturing and farming, population size, and past migration rates. The regressions include all lower order interaction terms and are weighed by the 1940 population of eligible men in each county and race. Standard errors are clustered at the county level.

Table A.5: The Effect of Discrimination on Black Volunteer Enlistment – Robustness to Alternative Measures, Controls, and Standard Errors

	Dependent Variable: # Volunteers per 100,000 Eligible Men						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Baseline	Controlling for Lagged Draft Rate	Controlling for Passing rate interacted with Black and Post dummies	States with Incomplete Information	Conley Adjustment Spatial cutoff: 2000km	Conley Adjustment Spatial cutoff: 3000km	Cluster at the Commuting Zone Level
Discrimination x Black x Post	-2.793	-2.793	-2.766	-3.067	-2.793	-2.793	-2.793
	(1.178)	(1.177)	(1.180)	(1.200)	(0.741)	(1.024)	(1.276)
Standardized Coefficient	[-0.005]	[-0.005]	[-0.005]	[-0.005]	[-0.005]	[-0.005]	[-0.005]
Observations	70,744	70,744	65,172	61,220	70,744	70,744	70,744
Mean Y	30.360	30.360	30.142	30.331	30.360	30.360	30.360
Std. Dev. Y	38.061	38.061	36.760	37.754	38.061	38.061	38.061

Notes: Observations are at the race, county and week level. Column (1) reports the baseline specification. Robustness exercises in subsequent columns are noted at the top of each column. All regressions include county-week fixed effects, race-week fixed effects, and week fixed effects x county-race variables from the U.S. 1940 Census: labor force participation, employment, education, age, occupational income scores, the share of employment in manufacturing and farming, population size, and past migration rates. In column (4), the excluded states are: Colorado, Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota, and Wyoming. The regressions include all lower order interaction terms and are weighed by the 1940 population of eligible men in each county and race. Standard errors are clustered at the county level. Standardized coefficients are reported in brackets.

Table A.6: The Effect of Discrimination on Black Volunteer Enlistment – Omit Outliers

	Dependent Variable: # Volunteers per 100,000 Eligible Men					
	Baseline	Omit Cook's Distance Outliers	Omit if Volunteers 1st/99th pct	Omit if Discrimination 1st/99th pct	Winsorize Volunteers 1st/99th pct	Winsorize Discrimination 1st/99th pct
	(1)	(2)	(3)	(4)	(5)	(6)
Discrimination x Black x Post	-2.793	-2.050	-2.067	-3.704	-2.469	-3.478
	(1.178)	(0.696)	(1.033)	(1.437)	(1.118)	(1.219)
Standardized Coefficient	[-0.005]	[-0.003]	[-0.003]	[-0.006]	[-0.069]	[-0.003]
Observations	70,744	66,938	68,364	69,260	70,744	70,744
R-squared	0.225	0.971	0.955	0.826	0.950	0.823
Adjusted R-squared	0.224	0.933	0.896	0.599	0.886	0.592
Mean Y	30.360	27.284	28.186	30.335	29.740	30.360
Std. Dev. Y	38.061	33.192	29.052	37.923	31.831	38.061

Notes: Observations are at the race, county and week level. Sample restrictions are stated in the column headings. All regressions include county-week fixed effects, race-week fixed effects, and week fixed effects x county-race variables from the U.S. 1940 Census: labor force participation, employment, education, age, occupational income scores, the share of employment in manufacturing and farming, population size, and past migration rates. The regressions include all lower order interaction terms and are weighed by the 1940 population of eligible men in each county and race. Standard errors are clustered at the county level. Standardized coefficients are reported in brackets.

Table A.7: The Effect of Discrimination on Black Volunteer Enlistment – Control for Distance to Places of Historical Importance

	Dependent Variable: # Volunteers per 100,000 Eligible Men				
	(1)	(2)	(3)	(4)	(5)
Discrimination x Black x Post	-2.793	-2.829	-2.246	-2.761	-2.887
	(1.178)	(1.254)	(1.253)	(1.161)	(1.179)
Tuskegee x Black x Post		-0.000			
		(0.003)			
Tulsa x Black x Post			0.004		
			(0.002)		
Closest 48ers city x Black x Post				-0.008	
				(0.005)	
Closest Refugee Camp x Black x Post					-0.003
					(0.004)
Observations	70,744	70,744	70,744	70,744	70,744
R-squared	0.823	0.823	0.823	0.823	0.823
Mean Y	30.360	30.360	30.360	30.360	30.360
Std. Dev. Y	38.061	38.061	38.061	38.061	38.061

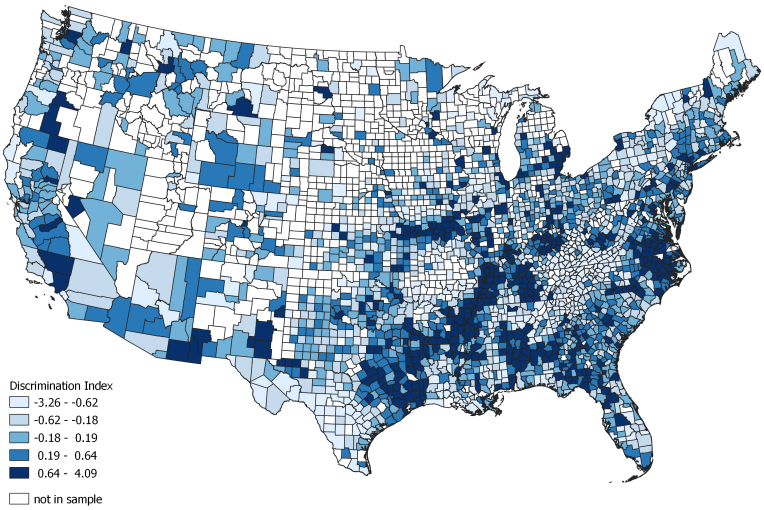
Notes: Observations are at the race, county and week level. All regressions include county-week fixed effects, race-week fixed effects, and week fixed effects x county-race variables from the U.S. 1940 Census: labor force participation, employment, education, age, occupational income scores, the share of employment in manufacturing and farming, population size, and past migration rates. The regressions include all lower order interaction terms and are weighed by the 1940 population of eligible men in each county and race. Standard errors are clustered at the county level.

Table A.8: The Effect of Discrimination on the Volunteer Enlistment of All Non-White Races

	Dependent Variable: # Volunteers per 100,000 Eligible Men				
	(1)	(2)	(3)	(4)	(5)
	Baseline	No Migration Controls	No Migration Controls	No Migration Controls	No Migration Controls
Discrimination x Black x Post	-2.793	-2.847			
	(1.178)	(1.179)			
Discrimination x Japanese x Post			0.452		
			(2.179)		
Discrimination x Chinese x Post				-0.543	
				(1.195)	
Discrimination x Native x Post					1.669
					(4.033)
Observations	70,744	70,744	8,530	14,944	21,652
R-squared	0.823	0.823	0.999	1.000	0.881
Adjusted R-squared	0.592	0.592	0.999	0.999	0.716
Mean Y	30.360	30.360	32.998	33.991	34.322
Std. Dev. Y	38.061	38.061	30.430	32.437	35.144

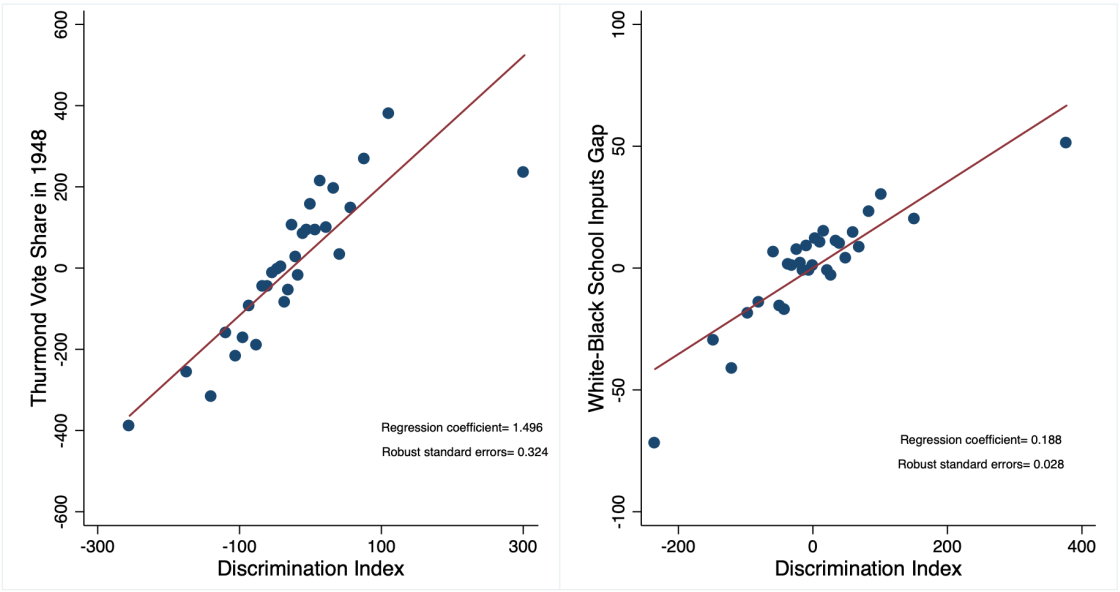
Notes: Observations are at the race, county and week level. All regressions include county-week fixed effects, race-week fixed effects, and week fixed effects x county-race variables from the U.S. 1940 Census: labor force participation, employment, education, age, occupational income scores, the share of employment in manufacturing and farming, and population size. The regressions include all lower order interaction terms and are weighed by the 1940 population of eligible men in each county and race. Standard errors are clustered at the county level.

Figure A.1: Discrimination (within State Variation)



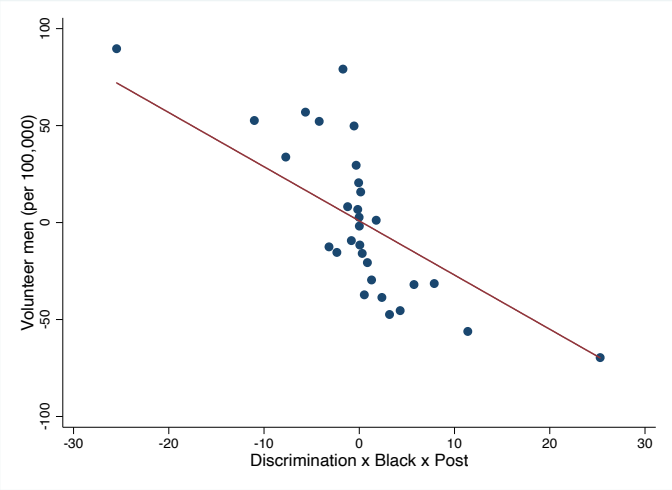
Notes: County-level discrimination demeaned by state fixed effects.

Figure A.2: Validating Discrimination



Notes: The figure reports the binned scatterplot (using 30 bins) of the relationship between the Discrimination variable and Thurmond's vote share in the 1948 elections (left panel), and white-Black school-inputs gap (right panel). Variables on the x and y-axes represent residual changes, after demeaning by state fixed effects. Regressions are weighed by size of the male population eligible to enlist in each county and estimate robust Huber-White standard errors.

Figure A.3: Baseline Residual Binned-Scatterplot



Notes: The figure reports the binned scatterplot (using 30 bins) of the baseline estimate of the triple interaction $D_j \times P_t \times B_{ij}$. See Table 4 column (5). Variables on the x and y-axes represent residual changes, after demeaning by the baseline controls in the baseline.

Figure A.4: Chinese American Enlistment in the U.S. Mainland and Hawaii