Racial Discrimination and the Social Contract: Evidence from U.S. Army Enlistment during WWII*

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June 2023

Abstract

This paper documents several new facts about the relationship between discrimination and political exclusion and the motivation to fight in wartime. The Pearl Harbor attack triggered a sharp increase in volunteer enlistment rates of American men, the magnitude of the increase was smaller for Black men than for white men and the Black-white gap was larger in counties with higher levels of racial discrimination. Discrimination reduced the quantity and the quality of Black volunteers. The discouraging effects of discrimination were more pronounced in places that were geographically distant from Pearl Harbor and in states that had joined the Union relatively recently. For Japanese-American men, enlistment rates were higher where the Japanese-American community was not interred than where it was interred. These and other results provide empirical support for the theory that discrimination and political exclusion reduce support for the government when it is under threat.

Keywords: Political and Economic Exclusion, Social Contract, Nation Building
JEL: D72, J15, N92, P16

*We are especially grateful to Saumitra Jha for his thoughtful and constructive comments; Daron Acemoglu, Sandeep Baliga, Tim Besley, Kate Casey, Leonardo D'Amico, Silvia Farina, Tim Fedderssen, Andy Ferrara, Stefano Fiorin, Martin Fiszbein, Nicola Fontana, Vicky Fouka, Nicola Gennaioli, Mikhail Golosov, Leander Heldring, Taylor Jaworski, Eliana La Ferrara, Kostas Matakos, Ross Mattheis, Gerard Padro-i-Miquel, Markus Nagler, Torsten Persson, Guido Tabellini, Edoardo Teso, Cecilia Testa, and Noam Yuchtman for their insights; and participants at several conferences and seminars for useful comments. We thank Martina Cuneo, Ricardo Dahis, Silvia Farina, Zhentao Jiang, Ludovica Mosillo, Monia Tomasella, Lan Wang, and Luca Zanotti for excellent research assistance. All mistakes are our own.

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> "Should I sacrifice my life to live half American? Will things be better for the next generation in the peace to follow? Would it be demanding too much to demand full citizenship rights in exchange for the sacrificing of my life? Is the kind of America I know worth defending?"
>
> – James G. Thompson, January 1942, *Pittsburgh Courier*.

1 Introduction

Most modern governments operate on the basis of a *social contract*, under which citizens support the state and, in exchange, the state provides public goods, such as protection to its citizens (Hobbes, 1651; Locke, 1690). In this spirit, recent political economy theories of the growth of democracies and the nation building process argue that wars and revolutions are important triggers of political inclusion. Governments become more inclusive when the ruling elites feel threatened because the outcomes of war depend on the consent and the motivation of its citizens, who will need to pay more taxes and fight in battles as conscripts or volunteers (Acemoglu and Robinson, 2000; Aidt and Franck, 2015; Jha and Wilkinson, 2012; Ticchi and Vindigni, 2008); and political inclusion and state capacity are complementary during wars (Besley and Persson, 2009, 2010).[1] Central to these theories is the assumption that during wartime, political inclusion will increase support and exclusion will reduce support for the government. There is little direct evidence for this claim.

The effect of exclusion on support for the government is ambiguous *ex ante*. On the one hand, the excluded population may withhold support. Individuals are more willing to exert effort to win the war if they believe that a defeat would reduce national public goods (Alesina et al., 2020). Since the excluded group benefits less from such public goods, their *extrinsic* value of winning the war, and thus their motivation to win the war, will be lower. Political exclusion can also reduce the *intrinsic* value of winning the war by weakening national identities (e.g., Bénabou and Tirole, 2011).[2] On the other hand, the excluded population may provide more support for the government during wartime to signal their value to the state (e.g., Spence, 1973). This was, for example, a common view amongst Black men in the United States during WWI (Williams, 2010) and Colonial Indian men during WWII (Karnad, 2015). The influence of exclusion on support for the government during wartime is ultimately an empirical question.

We aim to fill this gap in the literature by providing rigorous and novel evidence from a historically important and theoretically relevant context: racial discrimination and volunteer Army enlistment in the U.S. immediately after the December 7, 1941 surprise attack on Pearl Harbor.

This is an ideal context for our research question. The attack by Imperial Japan on U.S. soil transformed WWII from a distant war to one about the defense of the American nation. Victory was far from guaranteed. The experiences of WWII in Europe and Asia in the preceding years indicated the historical scale of the challenges to come. The American government anticipated needing to fully mobilize its population and economic resources. In this context, it is plausible to assume that a man's motivation to volunteer after

[1] Also, see Levi et al. (1997) for a study of the drivers of citizen consent during wartime.

[2] For example, Bénabou and Tirole (2011) provides a theoretical framework for how individuals trade-off the intrinsic and extrinsic costs of identity. Also, see Jia and Persson (2020) for a theoretical and empirical application in the context of China.

the attack was positively associated with his support for the American government. Also important for our study is the fact that Pearl Harbor occurred during the Jim Crow era, when racial discrimination was severe and pervasive. The Black population was *de facto* disenfranchised and the theoretical trade-offs we discussed earlier were intensely debated within the Black community, which felt considerable ambivalence about defending the explicitly racist American regime.

Our main data source is the universe of digitized WWII induction cards, which contain information about volunteer status, date, rank, county of origin and other characteristics. We also use the 1940 Population Census, which contains information about the number of eligible men and numerous demographic and economic variables that we use as control variables in the regression analysis. In addition, we use a large number of other data sources that contain information about the level of discrimination, the presence of Black organizations, farms and many other variables. We measure discrimination with the variables that have emerged in the literature that vary at the county level and are available for all 48 continental states for this period. For parsimony, our main measure of discrimination is the first principal component of variables that reflects formal, informal, political, social and economic discrimination experienced by Black men and their communities. We perform several exercises to validate this measure and show that our findings are robust to alternative measures of discrimination. Our estimating sample is a county, race and week panel.

The granularity of the data and the suddenness of the Pearl Harbor attack allow us to formulate and test sharp empirical hypotheses. If American men supported the U.S. government when it is under threat, then volunteer enlistment rates for all races should increase after Pearl Harbor. If racial discrimination undermined support, then the increase in enlistment for Black men should be smaller in magnitude than the increase for white men, who did not face racial discrimination. The Black-white difference captures the effect of discrimination in the Army, which followed Jim Crow practices, as well as discrimination in society. To isolate the effect of discrimination in society, we can compare Black enlistment from counties with higher and lower levels of discrimination. This is because men from different counties are pooled together after they enlist such that the discrimination a man faces in the Army does not vary with his county of residence prior to enlisting.[3] If societal racial discrimination reduces support for the government at war time, then the increase in enlistment after Pearl Harbor will be smaller in magnitude for Black men from counties with higher levels of discrimination than for those from counties with lower levels of discrimination. In contrast, the enlistment of white men should be similar in the two types of counties since the racial discrimination we study targeted Black individuals.

Our paper proceeds in several steps. First, we examine volunteer enlistment patterns in the raw data. We examine a narrow window of eight weeks before and eight weeks after Pearl Harbor. This allows us to capture the full impact of discrimination because the government had not yet had time to respond to the war by implementing other changes. We document that volunteer rates increased immediately after Pearl Harbor for both races. However, the magnitude of the increase was smaller for Black men than white men. Moreover, when we separately examine counties with high and low levels of discrimination, we find that the increase in Black volunteer rates after Pearl Harbor was higher in counties with low discrimination than

[3] Army assignment may be correlated across larger regions (e.g., men from Alabama are more likely to be assigned to a Southern base than men from Maine). We will address this by controlling for state-week fixed effects in the analysis.

counties with high discrimination. In contrast, volunteer enlistment rates of white men, who did not face racial discrimination, are similar across the two types of counties. The descriptive patterns are consistent with discrimination undermining the support for the U.S. government when it was under threat. The main caveat for interpreting these patterns as the causal effect of discrimination is that Black and white men, and counties with high and low levels of discrimination, can differ in ways that affect enlistment but are unrelated to discrimination. See Section 4.3.

The second exercise addresses omitted variables and estimates a plausibly causal effect of discrimination on volunteer enlistment. We estimate a heterogeneous treatment specification that compares enlistment between Black and white men, across counties with varying levels of discrimination, before and after Pearl Harbor. The baseline estimate includes county-week fixed effects, which control for differences across counties over time (e.g., distance to the nearest recruitment office), and race-week fixed effects, which control for differences across races over time (e.g., health differences between Black and white men). We allow the influence of all of the controls used in the study to be fully flexible over time to account for the possibility that their relationship with discrimination and enlistment changes after Pearl Harbor. The baseline also includes county-race fixed effects, which control for time invariant county-race-specific differences. Causal interpretation of the triple interaction coefficient assumes that there are no other county-race-post-Pearl Harbor specific differences that are correlated with discrimination *and* influence enlistment decisions.

We find that discrimination reduces Black volunteer enlistment. According to our estimates, the rise in Black volunteer enlistment during the eight weeks after Pearl Harbor was 66% higher in a county at the 25th percentile of the discrimination measure relative to a county at the 75th percentile. See Section 5.1. We interpret the differential response to Pearl Harbor between Black and white men in counties with varying levels of discrimination to reflect the influence of discrimination on a man's support for the U.S. government when it is under threat, a supply side effect.

There are two related issues to consider. The first is about alternative mechanisms that can explain the causal effect of discrimination. The main alternative in our context demand side factors. Historical accounts note that the Army sometimes turned away Black men during the early parts of WWII. This was due partly to the limited capacity of the Army to house and train Black men who lived and trained separately from white men, and partly to discriminatory local Army boards being unwilling to accept Black men (Flynn, 1984). These demand side effects would confound our preferred interpretation if capacity constraints or Army board attitudes were correlated with discrimination and changed after Pearl Harbor. We address this in several ways. First, we control for race-county-week-specific draft enlistment rates. Since capacity constraints and local boards affected volunteers and conscripted men similarly, including draft enlistment rates controls for demand-side factors.[4] Second, we control for the number of Black officers and the distance to the nearest military base in each county, which proxy for the capacity of the Army to absorb Black soldiers. Our main result is robust to these additional controls. We also consider and provide evidence against two additional mechanisms: differential salience in news of the Pearl Harbor attack and the possibility that Pearl Harbor triggered racism against the Japanese that spilled over to Black men. See Section 5.2.

[4]Controlling for draft enlistment also addresses the concern that Black men from counties with higher levels of discrimination have lower baseline health and are more likely to be rejected by the Army for legitimate reasons.

The second issue is the possibility that omitted variables undermine the causal interpretation. The main limitation of the two-way fixed effects baseline model is the potential presence of county-race-post-Pearl Harbor specific factors that influence volunteer enlistment. In our context, one *prima facie* concern is of outside economic opportunities, which could vary by race and the level of discrimination in a county and might affect the opportunity cost of enlistment after Pearl Harbor.[5] In practice, our interpretation is unlikely to be confounded by differential opportunity costs because war industry policies that affected outside opportunities occurred after the period we study (Aizer et al., 2020; Ferrara, 2022). Nevertheless, to be cautious, we address the possibility that outside economic opportunities and the opportunity costs of enlisting changed over time in several ways. First, since the opportunity cost likely depends on the sector of employment, we control for the interaction of week fixed effects with race-county-sector-specific employment and demographic structure. Second, since the outside economic opportunity varies with labor market competition and women increased their labor supply during WWII (Acemoglu et al., 2004; Goldin and Olivetti, 2013), we control for the interaction of week fixed effects and several measures of county-specific female labor supply. Finally, one may be concerned that economic opportunities of Black men depended on farm ownership. In our context, this happened for several reasons. Farm owners suffered larger economic losses if they enlisted and abandoned their farms. Also, in less developed areas, many white farm owners depended on cheap Black labor and may have prevented Black men from enlisting (Woodruff, 1994; Hornbeck and Naidu, 2014). Our estimates will be biased if Black men are more likely to own farms or if agriculture is less mechanized in counties with higher levels of discrimination. We address these concerns by including the interaction of week fixed effects with county-race-specific measures of farm ownership and other controls in the regression estimate. See Section 5.3.

In the third exercise, motivated by the prominence of Black WWI experiences in historical discussions, we investigate the influence of its legacy on Black enlistment after Pearl Harbor. We estimate the baseline variable with the addition of the triple interactions of the Black dummy variable, the post Pearl Harbor dummy variable with each of the three following variables: the share of Black WWI veterans in the county, the share of eligible Black men living with Black WWI veteran household heads and the share of eligible Black men living with Black WWI veterans who are not household heads. The main triple interaction of discrimination is robust and very similar to the baseline estimate. Interestingly, we find that a higher share of WWI veterans in the same county reduces Black enlistment after Pearl Harbor, but a higher share of eligible Black men living with WWI veteran household heads increases Black enlistment after Pearl Harbor. The results suggest that the negative effect of the disappointment after WWI on enlistment during WWII was transmitted at the community level, while a positive preference for fighting is shared within the household (Campante and Yanagizawa-Drott, 2015).[6] We conduct an analogous exercise with Civil War veterans. The main triple interaction with discrimination is robust, but the estimated Civil War veteran triple interaction terms are very imprecise.

Fourth, we examine whether the discouraging effect of discrimination on Black enlistment was moder-

[5] A man's occupation and pay inside the Army does not depend on his county of residence because men from different counties are pooled together after enlistment.

[6] Campante and Yanagizawa-Drott (2015) document that fathers' and sons' preferences for war are positively associated and interpret this as evidence for the intergenerational transmission of values.

ated or exacerbated by factors that may have influenced Black attitudes towards WWII. For example, Black men in the South may have had a different response than those in the North. Black organizations such as the NAACP and Black churches were also potentially influential: the NAACP was known to have encouraged Black enlistment, while Black churches are believed to have been relatively ambivalent. Alternatively, the number of years a man has lived in the Union can influence the strength of his national identity and, in turn, his motivation to enlist after Pearl Harbor. We also consider factors that affect the immediacy and the physical danger of the war, measured as the geographical proximity to Pearl Harbor, and general exposure to the Army, measured as the distance to the nearest military base. Finally, we examine the influence of Black radio ownership, which can moderate the discouragement effect by increasing the salience of the Pearl Harbor attack or exacerbate it by exposing listeners to more racist ideology. We find that the discouragement effect is smaller in magnitude in counties that were geographically closer to Pearl Harbor and in states that spent more years in the Union. These results suggest that proximity to the attack and physical danger and the historical duration of the collective or individual national identity can moderate the discouraging effects of discrimination. We also find suggestive and statistically imprecise evidence that the discrimination effect was larger in the South, as well as in counties with an NAACP chapter, fewer Black churches and higher Black radio ownership. See Section 5.4.

In the fifth exercise, we examine the effect of discrimination on the quality of volunteers. The theoretical literature that we discussed at the beginning of the Introduction focuses on military victory as the main motivation for inclusion. The probability of victory depends on both the quality and quantity of the soldiers. We find that discrimination reduced educational attainment of Black volunteers, the Army's main measure of quality amongst volunteers. Discrimination also reduced volunteer enlistment of Black men from agriculture and high-skilled urban occupations, while it increased the share of Black volunteers from low-skilled urban occupations. These results are consistent with the belief that men who worked in agriculture and high-skilled men faced higher opportunity costs in joining the Army and recent findings from other contexts that educated individuals are more politically engaged (Croke et al., 2016; Larreguy and Marshall, 2017). See Section 5.5.

The sixth exercise examines enlistment rates of Japanese American men, another group that was politically disenfranchised during WWII. Within a few months of Pearl Harbor, almost all ethnic Japanese individuals living on the U.S. mainland were interred. In 1943, the need for manpower motivated the U.S. Army to allow Japanese men to re-enter the Army. We document that, in the subsequent weeks, Japanese-American enlistment increased in Hawaii, where they were not interred, but remained near zero on the U.S. mainland. These patterns are consistent with discrimination and disenfranchisement discouraging military participation. See Section 6.1.

In the seventh exercise, we examine Black volunteer rates for the rest of 1942, before the government banned volunteer enlistment. The U.S. government, deeply concerned about low Black enlistment, engaged in a propaganda campaign to recruit Black men in mid-1942. The changes were mostly symbolic and superficial and the U.S. government and military continued to enforce Jim Crow practices. Nevertheless, we observe a rise in Black volunteer enlistment after the propaganda campaign begins. This suggests that intrinsic motivations play an important role in the enlistment decision. Consistent with the main analysis,

we find that the rise is driven by counties with lower levels of discrimination. We do not have measures of exposure to the recruitment campaign and there were many other changes in the second half of 1942. Thus, the longer run patterns should be interpreted cautiously as merely suggestive. See Section 6.2.

Finally, to be comprehensive, we present the increase in volunteer enlistment after Pearl Harbor for each race identified in our data. See Section 6.3.

This paper provides novel and rigorous empirical evidence that discrimination reduces support for the state from the excluded group during wartime. As such, this study complements several literatures. First, we provide empirical support for the largely theoretical literature about nation building and the expansion of the franchise discussed at the beginning of the introduction. We also complement recent empirical findings on the positive relationship between political participation and tax contributions in England after the Norman Conquest of 1066 (Angelucci et al., 2022), in German cities from the 13th to the 18th century (Becker et al., 2019), and recently, in the Democratic Republic of Congo (Weigel, 2020). Piecing together these empirical results forms a picture that is consistent with the idea that inclusion facilitates nation building and group division hinders the growth of nations and the efficacy of its policies (e.g., Alesina and Spolaore, 2005; Alesina and La Ferrara, 2005). Our finding that discrimination can undermine national identity complements the recent findings that common endeavors and inter-group contact can strengthen national identity and bond divided groups (Bazzi et al., 2019; Depetris-Chauvin et al., 2020).

Second, we complement recent studies about the determinants of political participation and military behavior during WWII. For example, Cagé et al. (Forthcoming) finds that those connected with Petain were more likely to collaborate with the Nazis. Fouka (2020) documents that assimilation policies of German Americans during WWI reduced their enlistment during WWII. Campante and Yanagizawa-Drott (2015) finds evidence of father-to-son transmission in the preference for fighting. Caprettini and Voth (2023) finds that support for WWII was higher in U.S. counties that received larger New Deal transfers.

Finally, we add to the large literature on discrimination, which has mostly focused on labor market outcomes.[7] Our findings demonstrate a new channel through which racial discrimination can be socially costly.

The paper is organized as follows. Section 2 discusses the historical background. Section 3 discusses the conceptual framework. Section 4 describes the data. Section 5 presents the main results. Section 6 presents additional findings. Section 7 concludes.

2 Background

2.1 Discrimination

The U.S. entered WWII during the Jim Crow era, when racial discrimination against individuals with African ancestry was at its severest since emancipation. Black men had very limited civil and political liberties, due to both formal and informal discrimination. Many southern states passed laws intended to disenfranchise the Black population starting in the 1890s. 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

[7] See Becker (2010) for an overview of the large literature about the consequences of racial discrimination in the U.S.

fountains, buses). Interracial marriages were made illegal.

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. 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. 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 had limited economic opportunities and were excluded from most non-menial jobs. War industrial policies were not yet in place during the early period of the war that we study. When they did come into place, Black workers benefited less than white workers (Davis, 1955).

2.2 WWII and Pearl Harbor

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. Over 180 U.S. aircrafts were destroyed along 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. News of Pearl Harbor was immediately broadcast across the United States via all available forms of communication, including newspapers, radios and churches. Congress officially declared war on Japan the following day.[8] For Americans, Pearl Harbor transformed WWII from a distant and foreign conflict about abstract ideas related to Colonialism, democracy and Fascism into a war of national self defense. Japan conducted additional and highly damaging strikes against the U.S. Pacific fleet in the following days, adding to the sense of a nation under attack among Americans.

The outcome of the war was highly uncertain at the onset. America's ability to command national resources for a large-scale international war in foreign territories was untested. Many military strategists doubted its capacity to coordinate the population and economy for total warfare. At the time of Pearl Harbor, the Axis powers were winning both in Europe and Asia. Germany already controlled Western Europe, Operation Barbarossa on the Eastern Front was a disquieting success and many expected Germany to win the Battle of Britain. Japan had similar successes in Asia and the Pacific. Important future turning points for the war such as the Battle of Stalingrad, which ended in February 1943, and the Battle of Midway, which took place in June 1942, had not yet taken place.

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 by the governments of the United States and its allies as critical to the success of the war effort. 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 critical for the U.S. government during the war.

[8] Germany declared war on the U.S. four days later, marking the American entrance into both the European and Pacific fronts.

2.3 Military Enlistment

Our main analysis focuses on the eight weeks before and the eight weeks after Pearl Harbor. Procedures for volunteer and draft enlistment were already in place and experienced little change during this short window of time. There were similarly little change in the operations of Army recruitment or eligibility criteria within this period. The one exception was the expansion of the age range of eligible men, which the empirical analysis will take into account.[9] Volunteers and conscripts were accepted into the military based on similar criteria (e.g., a health test). 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.

Military assignment 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 1940. Men had little discretion over occupations or assignments within the Army (Flynn, 1993; Ferrara, 2022). The share of Black men inducted as privates (98.9%) within our sample period is nearly identical between volunteers and conscripts. Military wage compensation did not vary by race within grade, rank, years of service and factors such as having a specialist rating. Black soldiers earned less than white soldiers with similar qualifications because they were inducted into a lower grade and rank, and faced more difficulty in qualifying for specialist ratings.

In our context, the predominant sentiment of the Army was to minimize Black enlistment (Flynn, 1984, 1993).[10] The ostensible argument was that Black soldiers would reduce the morale of white soldiers and empower Black resistance against Jim Crow (Osur and Force, 2000). During WWI, race-specific quotas restricted Black enlistment. These official quotas were abolished before WWII. Nevertheless, racial preferences still influenced enlistment because the induction of both volunteers and conscripts were implemented by over 6,000 local boards, whose members were chosen from the local community. Army boards were almost uniformly white. Only 1.1% of local board members were Black, and only three southern states had any Black officials.[11]

Black men were often rejected during pre-induction health examinations. Some of these were legitimate, while many others were excuses for discriminatory boards to avoid Black enlistees. For example, the high rejection rates justified by 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). Historians have also pointed out that the literacy standard of being able to write at the 4th grade level was unevenly implemented to reduce Black enlistment (e.g., Dalfiume, 1969). 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

[9] 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. 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.

[10] During later parts of WWII, when the draft had been expanded, discriminatory boards were known to give more generous exemptions to white men (Murray, 1971). The most common individual characteristics considered by local boards for deferrals or exemptions were marital status, fatherhood, farm status, or German, Asian, and Italian ancestry (Acemoglu et al., 2004; Aizer et al., 2020; Ferrara, 2022).

[11] See Davis (1955), Table 1, page 34.

soldiers prior to Pearl Harbor, many bases were unable to absorb Black enlistees right after the surprise attack.

Army boards had control over both volunteers and conscripts (Murray, 1971). The draft, which was initially implemented with a national lottery, shifted to administrative selection conducted by local boards in 1941. The same medical excuses were used to justify turning away Black conscripts as well as Black volunteers. The limited physical Army facilities also affected volunteers and conscripts similarly because the two groups were pooled together after enlistment. Acceptance rates of volunteers were unrelated to the local draft rates during this early period of the war. On December 5, 1942, an executive order banned volunteers so that the government could have full control over the labor force.

During WWII, approximately 51% of all enlistees were assigned to logistics and support positions.[12] Most Black men were in logistic positions. These included both skilled (e.g., nurses, physicians, dentists) and unskilled (e.g., porters) jobs.

It is hard to know the anticipated mortality risk of Black soldiers. On the one hand, the U.S. military establishment had been reluctant to allow Black men into combat positions. On the other hand, the history of racial discrimination meant that it would have been reasonable for Black men to expect to be sent to the least desirable and most dangerous positions. In practice, there were ultimately few Black combat troops, but they were highly decorated and suffered high mortality rates. 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. Those who were deployed overseas suffered a 25% mortality rate. The 92nd Infantry Division (the "Buffalo Soldiers") and the 761st Tank Battalion (the "Black Panthers") were activated in 1942 and sent into combat in 1944. The 92nd Infantry suffered a 20% casualty rate and similar rates of wounded and missing in action. The 761st Tank Battalion received a Presidential Unit Citation for its actions. In addition, a large number of individual members received medals, including 1 Medal of Honor, 11 Silver Stars, and approximately 300 Purple Hearts.

Race relations within the U.S. military mirrored those of the nation. 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 (e.g., Flynn, 1984).

2.4 Contemporary Discussions

When WWII erupted, a heated debate emerged within the Black community. On the one hand, some viewed military service as a hard-earned right. Many hoped that military service would be an effective way to signal the value of Black citizens to the United States, and that this would reduce future discrimination. On the other hand, there was much disappointment in the lack of social progress following WWI. The worst WWII atrocities, such as those of the Holocaust and Camp 731 in Manchuria, were not yet known. Many Americans during this early period viewed the discriminatory policies of the U.S. as little better than those prevailing in the Axis powers. For example, prior to Pearl Harbor, in 1937, *The New York Amsterdam*

[12] See McGrath (2007), Figure 52.

wrote "[Nazis' plan to segregate Jews on German railways was] taking a leaf from United States Jim Crow practices".[13] The Harlem-based Negroes Against War Committee urged Black Americans throughout 1939 and 1940 not to become interested in the events overseas. *Pittsburgh Courier* columnist George Schuyler asked "Why should Negroes fight for democracy abroad when they are refused democracy in every American activity except tax paying?" (Jefferson, 2008, p. 28-61).

In response to low Black enlistment rates at the beginning of WWII and the escalation of the war, the U.S. government embarked on an extensive recruitment campaign starting in the Spring of 1942, after the period of our main analysis. The campaign was not one decisive change, but rather a series of efforts from different parts of the military and government. The efforts were mostly symbolic and very little changed in terms of discrimination in American society or the Army. Nevertheless, the Black community, particularly organizations such as the NAACP, invested in increasing enlistment. Most famously, the Double V campaign encouraged Black men to fight for victory abroad so that they can win a victory at home. We discuss the later parts of 1942 more in Section 6.

To isolate the full impact of discrimination and avoid possibly confounding influences from war industrial policy, propaganda efforts and military shifts in the war (e.g., victory at the Battle of Midway), the main analysis focuses on the two months immediately after the attack on Pearl Harbor, before these other changes took place.

3 Conceptual Framework

The empirical analysis examines the effect of discrimination and political exclusion on support for the U.S. government during wartime, which we will proxy for with volunteer enlistment rates. As we discussed in the Introduction, this effect can be positive or negative in principle.

First, consider the negative forces. Discrimination and exclusion lower the economic (extrinsic) incentives for Black men to enlist. A man presumably enlists to help win the war and contribute to the continuation of the regime. But discrimination and exclusion lower the social and private value from winning by reducing economic opportunities and political and social rights. Black men were kept out of the best jobs, were effectively disenfranchised and their property and person were given little protection by the state. Discrimination and exclusion can also lower the psychological (intrinsic) motivation to enlist. Enlistment is partly motivated by patriotism and a person's national identity and discrimination can weaken both. Intuitively, this is the flip-side of how joint efforts towards common objectives facilitate the unification of national identities (Depetris-Chauvin et al., 2020). A man's intrinsic motivation can also depend on the legitimacy of the government and racial discrimination reduced the legitimacy of the U.S. government for the Black community (Levi et al., 1997). The American establishment was explicitly racist. Black people were officially held to be of lesser value than white people. Discrimination undermined the credibility that the U.S. government

[13] There were many explicit comparisons of the U.S. to the Nazis. In 1935, *The New York Amsterdam* wrote "If the Swastika is an emblem of racial oppression, the Stars and Stripes are equally so....". Langston Hughes in 1935 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". The ostensible pointlessness of fighting is 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?"

was fighting for freedom and democracy.

Second, consider the positive forces. Men who are politically excluded and disenfranchised may see a closely contested war as an opportunity to demonstrate their value to the establishment. The efforts of the discriminated group could be the difference between victory or defeat, and Black men may have viewed WWII as a chance to show that their cooperation is necessary for the good of all Americans. This was the spirit of the Double V campaign for encouraging Black enlistment later in 1942 (see Section 6.2). It was also a common view amongst Black men during WWI (Williams, 2010) and Colonial Indian men during WWII (Karnad, 2015).

Peer effects can amplify the forces described above. A man's motivation to enlist can be influenced by the actions of other individuals in the same network (e.g., Cagé et al., Forthcoming). A Black man's decision to enlist will be positively correlated with the enlistment decisions of his neighbors and peers. Since our measure of discrimination varies at the county level in our analysis, the estimates in this paper capture the social effect.

The discussion in this section highlights the main channels through which discrimination can influence the motivation of men to volunteer – i.e., the supply side effect of discrimination. After we present the main results, we will discuss alternative mechanisms – i.e., demand side factors.

4 Data

4.1 Enlistment

Enlistment is reported at the individual level in the *World War II Army Enlistment Records* (NARA-AAD, 2002) for the period 1938-1946. The dataset includes the universe of 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 and 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 about endogenous location (and other characteristics) in response to the U.S. entry into WWII.

Induction sometimes occurred after a volunteer applied or after the receipt of a draft "call-up" notice. During the early stages of the war, this was mostly due to the lack of adequate facilities for housing and training and was similar for volunteers and conscripts.

The main analysis uses a sample that includes Black and white men. Together, they account for more than 93% of all individuals in the enlistment data. The baseline sample includes 2,306 counties in the 48 mainland states. The counties that lack variation in enlistment rates during the time frame of our analysis are excluded from the sample. Some states do not have information from all Army boards. We will later show that the results are similar if we omit these states from the analysis.

The sample includes the eight weeks before and the eight weeks after the Pearl Harbor attack. We normalize enlistment by the number of eligible men in each county-race-week and conduct the analysis at

this level. For consistency, 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 and adjust the denominator to account for the expansion of eligible ages on December 20, 1941. We also use the 1940 Census and many other data sources for control variables. We discuss these later when relevant. We interpret voluntary enlistment as reflecting motivation to participate in the war and support of the U.S. government when it is under threat. We will provide evidence against alternative interpretations after the main result.[14]

4.2 Discrimination

We construct a parsimonious measure of discrimination by calculating the first principal component of political, social and economic discrimination for the county of enlistment. We include variables that are commonly used to measure racial discrimination during the early 20th Century that vary at the county level and that are available for the entire country: the presence of the Ku Klux Klan (KKK) from 1915 to 1940, the number of lynchings until 1939, the Democratic vote share in Congressional and Presidential elections between 1900 and 1930, the index of residential segregation, the racial gap in years of education and the racial gap in income inequality. Racial discrimination is highly persistent over time and the enlisted men in our sample are young: the median age is 23. Thus, our discrimination measure broadly reflects a person's own experience and that of his community. There is substantial variation within states.[15]

We conduct several exercises to validate the discrimination measure. First, to check that it captures variation that is relevant for discrimination, we compare it to two other well-known measures. The first one is the 1948 presidential vote share for Strom Thurmond, a Dixiecrat candidate who opposed efforts to end segregation. The second one is a summary measure of racial inequality in school quality as of 1940 in the spirit of Carruthers and Wanamaker (2017). These measures are not used to construct the principal component measure because they are not available for the entire U.S.[16] Our discrimination measure is strongly and positively associated with these other two measures.[17]

Second, we verify that each variable used to construct the principal component has a similarly signed correlation with enlistment.[18] We also demonstrate that the results are similar if we individually omit any of the variables discussed earlier from the construction of the principal component. These results alleviate the

[14] Army personnel (discharge) records provide an alternative measure of motivation and performance. Unfortunately, most service records from this period were destroyed in a fire. Data on medals and awards cannot be systematically linked to enlistment records.

[15] See Online Appendix Table A.1 for the sources of the variables used to measure discrimination. Online Appendix Figure A.1 plots the index of discrimination demeaned by state fixed effects.

[16] The Thurmond vote share is available only for a subset of counties in our sample. Black and white school quality is only available for the following states: Alabama, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, and Texas.

[17] Online 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. The correlation in both figures is positive and statistically significant at the 1% level.

[18] We estimate the baseline equation presented in the next section with each individual variable instead of the principal component measure. The coefficients all have the same sign, though precision and magnitudes vary (see Appendix Table A.3, Panel A). For comparison purposes, we also report standardized beta coefficients in square brackets.

concern that variables such as support for the Democrats is more strongly associated with racism in the South than in the North.[19] Third, we verify that the results are robust to including additional historical variables when constructing the principal component.[20] Finally, note that in the construction of the discrimination measure, we follow standard practices and proxy for income using occupational scores. We do not use the wage variable in the 1940 census because it excludes farm earnings and in-kind payments. Similarly, we use the traditional measure that pools white and Black men together in the 1950 Census when calculating occupational incomes. This measure captures cross-occupational wage differences between Black and white men, but misses within-occupational differences (Jácome et al., 2021). We will show later that our results are not sensitive to any of these choices.

Table 1 presents the correlates of county-specific variables and discrimination. The regressions will exploit within state variation. Thus, we regress discrimination on a number of potential correlates, measured in 1940, while controlling for state fixed effects. As in the regression analysis, we weigh each county-year observation by the number of eligible individuals during the sample period. Each row is one regression. The explanatory variable is reported in the row heading. The sample mean and standard deviation of that variable is reported in columns (1) and (2). The standardized correlation coefficient is reported in column (3).

Panel A shows that counties with higher levels of discrimination are larger in population and more urbanized. Discrimination is higher in places with larger Black populations and smaller white populations, and higher in places that are further away from Pearl Harbor. Panels B and C examine the correlates of discrimination for Black and white men separately. The main take-away is that the correlates can differ in size and even sign for the two groups. For example, discrimination is negatively (positively) associated with the share of Black men working in manufacturing (agriculture), but positively (negatively) associated with the share of white men working in manufacturing (agriculture).

The correlations show that discrimination is not random and correlated to economic and demographic factors that can influence the decision to enlist. The baseline regressions will address these omitted variables by controlling for two-way fixed effects. Panels B and C also show that the correlates of discrimination can differ between Black and white men. We address this after we present the main results by additionally controlling for a large number of county-race-specific variables interacted with week fixed effects.

4.3 Enlistment Rates Over Time

Figure 1 plots volunteer enlistment rates for Black and white men during the eight weeks before and the eight weeks after the attack on Pearl Harbor.[21] Consistent with the historical narrative that discrimination

[19] See Appendix Table A.3 Panel B. In results that are not reported in the paper but are available upon request, we verified that the Democratic vote share is statistically significant and large only for the sample of southern states. This is consistent with the notion that, at least until the 1930s, Democrats were the champions of racial exclusion and white supremacy in the U.S. South (Naidu, 2012; Ottinger and Winkler, 2022).

[20] These are the number of enslaved individuals divided by county population in 1860; the racial gap in employment rates 1940; the share of land cultivated in cotton and in sugarcane in 1940 (see Appendix Table A.3 Panel C). Data on the number of enslaved individuals in column (2) is taken from Haines et al. (2010). We impute zeros for counties that were not included. The results are unchanged when dropping counties with missing observations. Data on the share of land in cotton and sugarcane in columns (5) to (7) are reported by the 1940 Census of Agriculture. These were the crops most heavily associated with slavery or, after 1865, discriminatory behavior against African Americans (Fogel and Engerman, 1977).

[21] To have a fully symmetric window around the attack on Pearl Harbor, we consider the eight-week period before Pearl Harbor

discouraged Black volunteers during this period, Black enlistment was lower than white enlistment before and after Pearl Harbor. After Pearl Harbor, enlistment rates for both white and Black men sharply increase, but the magnitude of the increase is smaller for Black men.

These patterns are interesting for several reasons. The surge in overall enlistment after Pearl Harbor is consistent with the notion that the sudden attack motivated men to join in the defense of their nation. The fact that white men volunteered at higher rates than Black men after Pearl Harbor is consistent with discrimination discouraging Black enlistment. The fact that the Black-white gap widens after Pearl Harbor suggests that at least part of the post-Pearl Harbor gap reflects Black-white differences in their support for the U.S. regime. This is relevant for our study because military service is more important for the survival of the U.S. regime when the latter is under the threat of war than during peacetime. In the theories of nation building that we discussed in the Introduction, political exclusion and discrimination are important because they affect the regime's survival precisely when it is under threat.

Next, we divide the sample into counties with discrimination levels above and below the sample median. Figure 2 shows that after Pearl Harbor, the rise in Black enlistment is much larger in magnitude for counties with low levels of enlistment. Note that when we zoom in on the pre-Pearl Harbor period, we observe that Black enlistment is very low, but has positive values in most weeks in both samples (Appendix Figure A.3).[22] Figure 3 shows that the enlistment of white men, who did not face racial discrimination, is similar in the two subsamples of counties after Pearl Harbor. The patterns of Figures 2 and 3 are consistent with the discrimination discouraging the increase in Black enlistment after Pearl Harbor.

Figure 4 combines the figures just described and illustrates the variation underlying the regression estimates in the next section, which compares the difference in enlistment between counties with varying levels of discrimination, between Black and white men, before and after Pearl Harbor.

5 Results

5.1 Baseline Estimates

The baseline regression estimates the heterogeneous treatment effect of Pearl Harbor on volunteer enlistment rates for Black and white men, and allows the effect to vary with the extent of 1940 racial discrimination in his county of residence. We estimate the following equation:

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

The volunteer enlistment rate as a share of eligible men of race i in county j during week t, y_{ijt}, is a function of: the triple interaction of 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}; fixed effects at the race-week, λ_{it}, county-week, π_{jt}, and county-race levels, θ_{ij}. The lower order terms are absorbed by the fixed effects. All regressions are weighed by the race-specific population of eligible men in

(week -7 to week 0) and the eight-week period afterwards (week 1 to week 8). Week 0 is defined as the week ending on Sunday, December the 7th, and week 1 is defined as the week starting on Monday, December the 8th.

[22] Figure A.4 plots the analogous graph for white volunteer enlistment.

each county-week. Standard errors are clustered at the county level.[23]

We interpret the Pearl Harbor attack as a sudden increase in the threat to national security and hypothesize that a man's reaction to it depended partly on his support of the American regime. The latter, in turn, depends partly on the extent of discrimination that he and his community faced. One can also interpret Pearl Harbor as a shock to the demand for volunteers, which allows the econometrician to trace out the supply curve of volunteers which varies by discrimination. The coefficient of interest is β. If discrimination and political exclusion undermine a man's support for the government during war time and this negative effect dominates the positive signaling value of enlisting, then $\beta < 0$. In contrast, if the positive signaling value dominates the negative discouragement effect, then $\beta > 0$.

This specification controls for a large number of fixed effects to account for potential omitted variables that might be correlated with both discrimination and Black enlistment. County-week fixed effects control for differences across counties that vary over time, such as distance to Pearl Harbor or urbanization. Race-week fixed effects control for differences across races that vary over time, such as the racial gap in education. We also control for county-race fixed effects, which absorb time-invariant factors that vary by race and county, such as age or the employment share in key sectors like manufacturing or agriculture. For an omitted variable to confound our triple interaction of interest, it would need to differ by county, time and race *and* not be accounted for by the baseline controls. We minimize this possibility by focusing on a narrow window of time around the attack. We will also present many robustness checks after the main results, including the interaction of county-race-specific variables with week fixed effects.

Note that racial discrimination was pervasive throughout the United States during the period that we study and Black men faced discrimination everywhere. This means that our analysis will likely underestimate the influence of discrimination on enlistment.

Table 2 presents the baseline estimates. To illustrate the influence of the fixed effects, columns (1) to (3) begin by including the lower order interaction terms instead of the interacted fixed effects. Column (1) controls for state fixed effects and a dummy variable that takes the value of one if the Pearl Harbor attack has occurred. Column (2) controls for county instead of state fixed effects. Column (3) additionally controls for week fixed effects instead of the post-Pearl Harbor dummy variable. The triple interaction coefficient of interest is stable across specifications. It is negative and statistically significant at the 1% level. It shows that in places with more racial discrimination, the Black-white gap in volunteer enlistment increased after Pearl Harbor. The triple interaction and the lower order interaction coefficients are consistent with the descriptive evidence presented in Figure 4.

In column (4), we present the baseline specification that includes race-county, race-week and county-week fixed effects. The fixed effects absorb the lower order interactions. The interaction coefficient of interest in column (4) is -2.81 and statistically significant at the 1% level. Thus, the discouragement motive dominates the signaling motive.

[23] In Appendix Table A.5, we consider the possibility of spatially correlated errors: Conley adjustment with spatial cutoffs of 2,000km or 3,000km; clustered at the commuting zone; spatial HAC errors using 2 lags, 7 lags and 14 lags. To correct for heteroskedasticity and serial correlation in the error term, we use the Newey–West estimator and define the number of lags following Greene (2012). In particular, we consider the integer approximate of $T^{(1/4)}$, where T is the total number of weeks. The results are unchanged when using different values for the number of lags.

To assess the magnitudes, note that one standard deviation of the pre-Pearl Harbor Black volunteer enlistment rate is 6.4. The coefficient implies that after Pearl Harbor, a one standard deviation increase in discrimination (1.5) reduced Black volunteer enlistment by 0.65 standard deviations ($(-2.81 \times 1.5)/6.4 = 0.65$, or 4.22 per 100,000 eligible individuals). Since the average Black volunteer enlistment rate during the sixteen week period of our analysis is 6.01 per 100,000 and the inter-quartile range of discrimination is 1.41, our estimates imply that enlistment rates for Black men living in a county at the 25th percentile of discrimination would have been 66% ($(-2.81 \times 1.41)/6.01 = 0.66$) higher that for those living in a county at the 75th percentile.

Since discrimination is measured with noise, we also estimate the baseline where we measure discrimination as a dummy variable that equals one if the discrimination measure is above the sample median and zero otherwise. Column (5) shows that the triple interaction coefficient is -10.9 and statistically significant at the 1% level. This implies that after Pearl Harbor, the enlistment rate of Black men from counties with above sample median discrimination was lower than that of Black men from counties with below sample median discrimination by approximately 11 per 100,000 men. The sample mean of Black enlistment is 8.663 per 100,000 in the eight weeks after Pearl Harbor. Thus, the effect of discrimination is large.

One potential concern with our baseline estimates is that we may be mis-measuring wage discrimination by not accounting for within-occupation income inequality by race. To address this concern, we replicate the procedure detailed in Jácome et al. (2021) to calculate race-specific occupational income scores in column (6). The interaction coefficient using the disaggregated measure is similar to the baseline.

To understand the variation driving our baseline estimates, we include state$\times$race$\times$week fixed effects, which controls for race-specific differences across states and their changes over time in a fully flexible manner. Column (7) shows that the estimate is -3.154 and statistically significant at the 1% level. This suggests that the baseline result is mostly driven by within state and race differences in volunteer enlistment, rather than cross-state variation such as diverging responses to Black enlistment between the North and South after the Pearl Harbor attack.

The baseline estimate is weighed by the number of eligible men for each race and county measured in 1940 to approximate aggregate population effects. Column (8) estimates unweighed regressions, where all county-year observations have the same weight. The triple interaction coefficient is negative (-9.853) and statistically significant at the 1% level.

Finally, in column (9), we estimate the baseline without the states with incomplete induction data (Colorado, Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota, and Wyoming). The estimate is very similar to the full sample estimate in column (4).

5.2 Alternative Explanations

The empirical findings show that the severe and pervasive racial discrimination moderated the positive response of Black volunteer enlistment after the Pearl Harbor attack. We interpret this to mean that such severe discrimination corroded the support of the U.S. regime from Black men. The main alternative explanation to our supply-side interpretation is that low Black enlistment rates in high discrimination counties reflect Army-driven demand-side factors instead of the motivation of Black men. Local boards were established prior to Pearl Harbor and operated in a similar way just before and after Pearl Harbor. Local boards

were selected from the local white community and controlled enlistment. If those in counties with higher levels of discrimination were more resistant to Black soldiers or had to turn away Black men because they had less capacity to house and train them, then our results may be partly driven by demand-side forces.

To address these concerns, we control for the draft enlistment rate for each race, county, and week. The constraint for Black enlistment arising from discriminatory preferences of local boards and the capacity of regional facilities for Black soldiers were similar for volunteers and conscripts. As we discussed in the Background section, the draft was implemented by local boards during this period. Volunteers and drafted men were pooled together after induction, living and training in the same facilities. The causes for disqualification (e.g., health) were similar for conscripts and volunteers.

Column (2) of Table 3 shows the triple interaction coefficient is similar to the baseline (column 1) when we control for race-county-week specific draft enlistment rates. The results are similar if we replace the contemporaneous draft rate with its one week lag in column (3). The robustness of our estimate supports our supply-side interpretation and goes against the demand-side explanation. Controlling for draft rates also addresses the concern of a mechanical relationship between conscripts and volunteers.[24]

In columns (4) and (5), we control for two proxies of the local capacity of the Army to train and house Black men. The first proxy is the number of Black and white officers as a share of all eligible men. We calculate this variable for each race and county using the occupation and race information in the 1940 Census and control for its interaction with week fixed effects. The second proxy is the distance from the nearest military base. We control for its interaction with race and week fixed effects.[25] The interaction coefficient of interest is robust with both controls.

5.2.1 News Coverage of Pearl Harbor and Changes in Racial Views

One may also wonder whether 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 *ex ante*, given that the attack was reported immediately throughout the entire nation. Moreover, county-week and race-week fixed effects account for the possibility that news penetration differs by population density or the size of a county. County-race controls interacted with week fixed effects (discussed below) account for the possibility that factors such as differential residential, demographic or occupational patterns can affect news access.

To be cautious, we examine coverage in local newspapers, the main news platform alongside radio. We conduct a 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 by the number of pages containing the word "and". Thus, our coverage measure reflects the share of coverage in a given paper and week.[26]

[24] In principle, the relationship between the draft rate and the volunteer rate can be positive or negative. On the one hand, as more men are drafted, there will mechanically be fewer eligible men left to volunteer. On the other hand, Black men may be more likely to volunteer if they know that there will be other Black men in the Army from the draft. In our sixteen-week sample, we find no relationship between conscripts and volunteers. These results are available upon request.

[25] We collected data on the location of all Army camps and bases that were active as of December, 1941 from multiple sources and calculated the distance to each county centroid.

[26] Local newspapers data come from the website Newspapers.com. Data are available for 584 of the 2,306 counties in our main sample. The number of pages is not directly observable. Results, not reported for brevity, are very similar without the normalization by paper length.

Panels A and B of Figure 5 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" (Panel C) and "We Need You" (Panel D), amongst the most used phrases in Army recruiting. 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 everyday for the first month after the attack.[27] The descriptive evidence is consistent with the conventional wisdom that news of Pearl Harbor was unlikely to have systematically varied across counties with different levels of discrimination or between Black and white men.

5.2.2 "Spillover" Racism

Given that propaganda against Japan after the Pearl Harbor attack contained a high degree of racial prejudice against the Japanese, one may question whether this spilled over and affected racism against the Black population. Spillover racism would affect our estimates if it varied with discrimination against the Black population. The spillover can be positive or negative. On the one hand, the sudden appearance of an external threat might have created a sense of unity between the white and the Black population. On the other hand, Pearl Harbor may have increased hostility against all minorities. The effect of the spillover on Black enlistment is also ambiguous *ex ante*. Solidarity between Black and white populations can encourage Black men to enlist. However, Black men may also be motivated to enlist more in places where spillover racism is negative, as a means to distinguish themselves from the Japanese.

To investigate the influence of spillover racism, we examine whether the number of racist articles against the Black population increases after Pearl Harbor and differs between high and low discrimination counties. Specifically, we count the number of articles in local newspapers that contain the word "Negro" and a series of racially disparaging stereotypes.[28] Figure 6 plots weekly averages for counties above (solid line) and below (dashed line) the sample median for discrimination. As expected, newspapers in counties with higher discrimination have a higher frequency of racial stereotypes in all weeks. However, there is no increase after Pearl Harbor for either sub-sample and the gap between the two remains constant overtime. Thus, there is no evidence that Pearl Harbor triggered additional racism towards the Black population.

5.3 Robustness

5.3.1 Outside Opportunities

The main empirical concern about the causal interpretation of our baseline estimate is omitted variables. Specifically, factors that vary by county, race and change after Pearl Harbor that are correlated with discrimination and enlistment are not accounted for by the two-way fixed effects in the baseline specification. In our context, an important concern is that the Black-white difference in the opportunity cost of enlisting varies with discrimination and changes as the U.S. enters into WWII. Black men gained less than white men from

[27] These statistics are not reported in tables for brevity. We do not divide the papers across counties *and* race because our sample contains only six Black newspapers (*California Eagle, The Detroit Tribune, The Mobile Weekly Advocate, The New York Age, The Pittsburgh Courier,* and *The Weekly Review*).

[28] To compile the list of derogatory terms most commonly used in our historical context, we follow Fouka et al. (2022). As before, we normalize by the number of pages containing the word "and".

the war industry that arose after Pearl Harbor and the gap likely varied with discrimination across counties because the use of federal money and employment was locally administered.[29] This is unlikely to confound the triple interaction effect of interest because most of these changes occurred after our study period. However, one may question whether enlistment decisions were made in anticipation of future government investment.

We address this concern in several ways. First, we consider the fact that economic opportunities differ by employment status and age and control for average employment rates and the average age of eligible men for Black and white men in each county in 1940. We control for their interactions with week fixed effects because these variables are time invariant and their influence on the opportunity cost evolves with the development of the war.[30] The estimates in columns (6) and (7) of Table 3 are similar to the baseline.

Following a similar logic, we interact week fixed effects with the county-race-specific share of employment in each 1-digit sector. This is motivated by the fact that economic opportunities, and thus, the opportunity cost of enlisting, varied across sectors. We alternately introduce the controls for each sector into the baseline specification. Figure 7 plots the main triple interaction coefficient and 95% confidence interval from these regressions.[31] The first dot from the left is the coefficient from the baseline specification and the subsequent ones going towards the right display results controlling for these additional variables. The magnitude and the precision of coefficients are similar to the baseline.

Second, we consider the notable increase in female labor supply during WWII (Acemoglu et al., 2004; Goldin and Olivetti, 2013) and the fact that this may increase labor market competition for Black men. Most of the increase occurred after our study period, but we will control for these potential changes out of an abundance of caution. Black and white women differed in labor supply and faced different economic opportunities, which implies that the degree to which they competed with Black and white men in the labor market also differed. Thus, we control for the interaction of week fixed effects and county-race-specific female labor supply. In Table 3, we alternately measure female labor supply as female labor force participation in column (8), the number of women in the labor force relative to the number of men who were eligible to serve in column (9) and the share of women between ages 15 and 35 in column (10). The last measure is motivated by Goldin and Olivetti (2013), which finds that women in this age range were particularly likely to enter the labor force during WWII.

The opportunity cost of enlisting was particularly high for farm owners. In fact, later in the war after the period that we study, farm ownership was a key consideration for obtaining a deferral or exemption from the draft (Geva, 2013). This can bias our results if Black men were less likely to be farm owners in counties with higher levels of discrimination. The earlier results show that our findings are robust to controlling for the interactions of week fixed effects and the share of Black and white employment in agriculture. But not all

[29] 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, this number had only risen to 1.3%. 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 (Davis, 1955).

[30] We do not control for the interactions of the Black-white occupational income score gap because this variable is used to construct the discrimination principal component.

[31] The coefficients and standard errors are reported in Appendix Table A.4.

those employed in agriculture own farms. In Table 4, we address this concern more directly by controlling for the interaction of week fixed effects with different measures of farm ownership reported in the Census of Agriculture. These are the race-county specific measures of the number of farms in 1935 (column 2), the number of individuals living in farms in 1940 (column 3) and the share of land in farms in 1940 (column 4).

A related, but distinct concern is that white landowners in counties with high levels of discrimination were particularly motivated to prevent Black men from enlisting because of suppressed Black labor costs in these areas. To address this concern, we control for the interaction of week fixed effects, the Black dummy variable and proxy variables for Black labor coercion from earlier studies.

In columns (5) and (6) of Table 4, we consider average farm size and the average value of land in farms. These variables capture the idea that landowners' coercive power was increasing in farm size (Spencer, 1994). Next, in columns (7) and (8), we include the share of farms with horses or mules and the average number of horses or mules per farm. These controls address the concern that opposition to Black volunteer enlistment might have been higher in counties where mechanization was lower and landowners were thus more reliant on Black labor (Woodruff, 1994; Hornbeck and Naidu, 2014). Following a similar logic, columns (9) and (10) control for the share of farms with tractors and the number of tractors per farm.[32] The triple interaction coefficients of interest are very similar to the baseline.

5.3.2 WWI Veterans

In this section, we consider the legacy of Black WWI enlistment, which plays a prominent role in historical narratives. Since the location of Black WWI veterans might be correlated with discrimination, the legacy of Black WWI enlistment can bias the baseline estimate if it is correlated with Black enlistment in WWII.

The influence of the WWI legacy on the motivation of Black men to enlist after the Pearl Harbor attack is also interesting in and of itself. The effect is ambivalent *ex ante*. The historical accounts emphasize the disappointment in the Black community after WWI. This may have reduced the enlistment of younger generations of Black men. At the same time, Campante and Yanagizawa-Drott (2015) finds that the motivation to join the military partly depends on individual preferences and values that are transmitted from father to son. This suggests that young Black men growing up with WWI veterans may be more likely to volunteer after Pearl Harbor.

Table 5 first reports the baseline specification in columns (1) and (2) for the full sample and the sample restricted to counties for which we observe the presence of a WWI veteran.[33] The triple interaction estimate for discrimination is very similar in the two samples. In column (3), we control for the number of Black

[32] The additional control variables in Table 4 are reported by the 1940 Census of Agriculture.

[33] 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. Similar to Mazumder (2019), we calculate age in 1917 for each Black man in the 1930 U.S. Census calculate the number of Black men eligible to serve in WWI (ages 18-45) in 1917. The share of WWI Black veterans in 1930 is the number of WWI veterans divided by the number of eligible individuals. Using the age of Black men in 1930, we can construct the share who would have been eligible to serve in WWII and were living in a household with a WWI veteran. The validity of this measure depends on migration rates during 1930 and 1940. Using the 1940 census, we find that migration between 1935 and 1940 of Black men is uncorrelated with 1930 WWI presence.

WWI veterans normalized by the number of Black men in the county who would have been eligible to serve in WWI based on their age, as well as the share of Black men in each county eligible to enlist in WWII who are living in a household with a Black WWI veteran. In column (4), we separately estimate the effect of the share of men living with a Black WWI veteran into households in which the veteran was and was not the household head.

The estimates show that the main result for discrimination is robust to the inclusion of these additional controls and is not confounded by the legacy of WWI. They also shed light on additional motivations for Black men to (or not to) enlist. The triple interaction coefficient for the share of Black WWI veterans living in the county is negative in columns (3) and (4) and statistically significant at the 10% level in column (4). This is consistent with the view that the WWI legacy discouraged the next generation of Black men from enlisting after Pearl Harbor and suggests that this legacy effect is transmitted at the community level. In the same specifications, the triple interaction of the share of eligible Black men living with a WWI veteran in column (3) and the share living with a veteran head in column (4) are positive, large and statistically significant at the 10% level. This supports the view that there is father-to-son intergenerational transmission of a preference for participating in wars.

In columns (5) and (6), we present analogous estimates for the presence of Civil War veterans. Our main interaction coefficient of interest is robust. The interaction coefficients of Civil War veterans are positive but statistically imprecise.

5.3.3 Imported Discrimination

The period we study falls between the two waves of the Black Great Migration (Collins, 2021). This raises the question of the role of discrimination imported from other counties by migrants. For example, if Black men moved from high to low discrimination counties, then the high enlistment rates we observe in low discrimination counties may be partly driven by men who originated from high discrimination counties. In this case, our estimates would understate the negative effect of exposure to discrimination on enlistment. To investigate this possibility, we construct a proxy for "imported" discrimination using the question from the 1940 U.S. Census that asks individuals for their county of residence in 1935.[34]

Column (7) of Table 5 controls for the triple interaction of imported discrimination, Black and the post-Pearl Harbor dummy variable. The coefficient of interest remains negative and statistically significant. This implies that our main result is driven by own-county discrimination and not by discrimination transmitted by new migrants. The triple interaction of the migration transmitted discrimination is statistically zero. The standardized coefficient in square brackets is small and the estimate is statistically imprecise.

5.3.4 Additional Sensitivity Checks

We conduct several additional sensitivity checks. One concern is that our results may be driven by a few observations with extreme values and that might be particularly influential. To address this potential issue, we perform a randomization inference exercise in the spirit of Young (2019). We randomly assign

[34]For each county, we calculate the number of Black migrants arrived between 1935 and 1940 and multiply this by discrimination in the county of origin. We then scale this measure by the 1940 (receiving) own county Black population to account for the fact that the same number of migrants will have different effects depending on the size of the destination county.

the discrimination measure across counties and re-estimate the baseline specification. We do this for 1,000 iterations. Figure 8 is a density plot of the coefficients. The dashed vertical line corresponds to the coefficient from the baseline using the actual data (i.e., the number reported in column 4 of Table 2). The results show that our baseline estimate is unlikely to be driven by coincidence.

Table 6 presents the baseline enlistment regression that includes a large number of additional variables interacted with week fixed effects and the Black dummy variable to allow their influences to vary over time and differ for Black and white men. Panel A column (1) restates the baseline for comparison. In column (2), we control for the interaction of week fixed effects with cross-county net migration for each race between 1930 and 1940 estimated by Gardner and Cohen (1992).[35] This addresses the concern that migration rates were correlated with discrimination and enlistment. To address concerns over the accuracy of the calculated migration rates, column (3) alternatively controls for migration rates during 1935-1940 based on the reported 1935 and 1940 county of residences in the 1940 census.[36] In column (4), we control 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) interacted with the Black and the post-Pearl Harbor dummy variable.[37] This addresses the concern that race misclassification in the census was correlated with discrimination and changes in Black volunteer enlistment after Pearl Harbor.

In columns (5) to (8), we control for proxies of exposure to events that may have influenced Black men's attitudes about the U.S. armed forces. The first African American U.S. Army Air Force was trained in Tuskeegee, Alabama. One of the most prominent attacks on the Black community occurred in Tulsa, Oklahoma, in 1921 (e.g., Albright et al., 2021). Ramos-Toro (2021) finds that Civil War refugee camps were conducive to the development of racially-progressive politics, which persisted over time. Dippel and Heblich (2021) documents that the historical presence of (emigrated) leaders of the failed 1848-1849 German revolution (the "48ers") is associated with stronger support for racial equality in the long run, possibly influencing Black Americans' incentives to volunteer. We control for distance to Tuskeegee, Tulsa, the nearest refugee camp and the nearest 48ers settlement.[38]

In Panel B, we control for variables that we discuss in the next section when we examine heterogeneous treatment effects: NAACP presence, Black Church membership rate, distance to Pearl Harbor, years in the Union and Black radio ownership rate.

The main result is robust to the additional controls.

5.4 Heterogeneous Effects

In this section, we examine what factors exacerbate or moderate the discouraging effects of discrimination on Black enlistment after Pearl Harbor. We divide the sample according to whether the county is in the South, the presence of an NAACP chapter, 1936 county-level membership rate in Black churches,

[35] Recall that the location observed in the NARA dataset is usually the location in 1940, which moderates concerns of endogenous location in response to WWII. The results are unchanged when replacing 1930-1940 migration rates with those from previous decades (e.g., 1910-1920, 1920-1930, or 1910-1930). These are not reported for brevity and are available upon request.

[36] For each county and race, we calculate the net migrants in 1935 and 1940 divided by 1940 county population.

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

[38] Data on the nearest refugee camp and 48ers settlements come from Ramos-Toro (2021) and Dippel and Heblich (2021), respectively.

the number of years in the Union, distance to Pearl Harbor, the distance to the closest military base and Black radio ownership. The NAACP typically encouraged Black enlistment, while Black churches were more ambivalent.[39] The number of years the state of residence has been a part of the Union can affect the strength of the national identities of its residents because they are more likely to have attended schools or social and community activities that emphasize the national identity. The distance to Pearl Harbor affects the immediacy of the physical danger of the war. The distance to the nearest military base can affect a man's exposure to the Army. Black radio ownership can increase the salience of the Pearl Harbor attack.

The estimates in Table 7 show that the discouragement effect is smaller in magnitude in counties that were geographically closer to Pearl Harbor (column 4) and are in states that spent more years in the Union (column 5). These results suggest that proximity to the attack and physical danger, and the historical duration of the collective or individual national identity can moderate the discouragement effects from discrimination. The p-value for the difference in the two subsamples is presented at the bottom of the table in Panel E. The differences are statistically significant at the 5% or higher level. The estimates also suggest that the discrimination effect was larger in the South, as well as in counties with an NAACP chapter, fewer Black churches and higher Black radio ownership. However, Panel E shows that the differences are not statistically significant.

Note that we also examine whether the discrimination effect was exacerbated or muted by the presence of WWI veterans, net migration rates, the immigrant share from Japan or Germany, urbanization and other measures of economic development, and distances to Tuskegee, Tulsa, the closest Civil War refugee camp or the nearest 48ers city. We find no evidence of differential effects and do not report these in tables for brevity. They are available upon request.

5.5 The Quality of Volunteers

In this section, we examine the effect of discrimination on the quality of Black volunteers. The theoretical literature that we discussed at the beginning of the Introduction focuses on military victory as the main motivation for inclusion, and the probability of victory depends on the quality as well as the quantity of soldiers. The Army's most important metric for quality is educational attainment, which was also the most important determinant of military rank at the time of induction (Flynn, 1998). Table 8 column (1) examines the educational attainment of the enlisted volunteer as the dependent variable. We measure educational attainment as a dummy variable for whether the man completed high school, a key metric used by the Army. We aggregate the individual enlistment data to the county, race and week level. The dependent variable is the share of volunteers in each county-race-week cell that has completed high school. In our sample, 21.8% of Black men and 54.1% of white men had completed high-school. Since the sample is restricted to counties and weeks where at least one man of each race volunteered, the number of observations is smaller than in the earlier analysis.

[39]Data on the local presence of NAACP chapters are from Gregory and Estrada (2019). 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 reported in the Census of Religious Bodies. Note that we do not separately examine distance to Germany because it is inversely correlated to distance to Japan and does not provide additional information.

Column (1) shows that discrimination reduced the share of Black enlistees who have completed high school by four percentage points. The triple interaction coefficient is statistically significant at the 1% level.

In columns (2)-(5), we examine the sector of employment of volunteers prior to enlistment. Approximately 60% of enlistees in our sample worked in agriculture, manufacturing or service, 30% of volunteers reported some other occupation and approximately 10% of volunteers reported no occupation. The dependent variable in column (2) is the share of volunteers in each county-race-week cell that worked in agriculture before enlisting. The interaction coefficient is -0.043 and it is statistically significant at the 1% level. Thus, discrimination reduced enlistment from Black men who work in agriculture.

In columns (3) to (6), we examine the share of men working outside of agriculture. We examine these sectors in the order of average educational attainment of the Black men who work in each sector. Column (3) shows that discrimination reduced Black volunteers who worked in services, which includes high skilled professional services as well as low-skilled services. In our sample, 44% of Black men and 85% of white men who work in services graduated from high school. It is the highest skilled sector in terms of educational attainment for both races. The coefficient is -0.614 and statistically significant at the 1% level. Column (4) shows that discrimination has no effect on Black enlistment amongst men working in manufacturing. In our estimating sample, 30% of Black men and 59% of white men who work in manufacturing graduated from high school.

Column (5) shows that discrimination increases Black enlistment amongst men who work in "other" sectors. The coefficient is 0.621 and statistically significant at the 1% level. Workers in other sectors are relatively unskilled. In our estimating sample, 23% of Black men and 59% of white men who work in other sectors graduated from high school. Column (6) shows that discrimination has no effect on Black enlistment from those without stable or well-defined occupations. This group has the lowest skill level. In our sample, 21% of Black men and 38% of white men who work in unknown sectors graduated from high school.

The results in this section show that discrimination reduced the quality of Black volunteers measured by educational attainment. It also shows that discrimination changed the occupational composition of Black volunteers. It reduced the number of men from agriculture and high skill non-agricultural occupations. In contrast, it increased the share of volunteers from low-skilled occupations. These results are consistent with the belief that men who worked in agriculture and high-skilled men faced higher opportunity costs in joining the Army. The latter follows from the fact that most Black men were assigned to menial positions in the Army. Thus, educated Black men who had better outside opportunities than uneducated Black men suffered a larger relative loss when joining the Army. The results on the quality of men are also consistent with findings from other contexts that educated individuals are more politically engaged (Croke et al., 2016; Larreguy and Marshall, 2017).

6 Additional Results

6.1 Japanese Americans

Japanese American men, who volunteered at high rates immediately after Pearl Harbor, were barred

from the military soon after the war began.[40] Civilians with Japanese ancestry were segregated and disenfranchised. 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 of notice to dispose of their property other than what they could carry, leading to 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.[41] Internment was implemented rigorously on the U.S. mainland. In Hawaii, general internment of Japanese Americans, who comprised approximately 30% of the total Hawaiian population, was seen as practically infeasible. Only 0.09% Japanese Americans in Hawaii (1,500 people) were sent to the mainland for internment. Due to the high demand for men, the U.S. military backtracked on its initial ban and 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.

We do not have county-level measures of discrimination against the Japanese and cannot replicate the main analysis at the same level of granularity. However, we are able to investigate the effect of discrimination and political exclusion on the motivation of Japanese American men to enlist in the U.S. Army by comparing Japanese American volunteer rates before and after they were allowed to re-enter the Army, between the U.S. mainland and Hawaii. If discrimination and exclusion undermined the motivation of these men, we should see lower enlistment from the mainland.

The first cohort to be allowed re-entry was inducted in March 1, 1943. The government aimed for 3,000 volunteers from the mainland and 1,500 from Hawaii. To be eligible for selective service, loyalty questions were administered to all Japanese American men.[42] Only those who provided acceptable answers were inducted into the military. This conditionality gave Japanese American men discretion over whether they enlisted (e.g., Hayashi, 2010). For consistency with our previous analysis, we restrict attention to the eight weeks before and after March 1, 1943.

Figure 9 plots Japanese American enlistment rates over time for the mainland and Hawaii. It shows that enlistment was almost zero prior to March 1st because Japanese Americans had been banned from service with very few exceptions. After the policy change, there was a large spike in enlistment in Hawaii, but no noticeable change from the mainland. The reduction in enlistment in the last few weeks of the figure corresponds to the War Department's temporary pause in Japanese American recruitment to assess

[40] Selective service stopped accepting Japanese American men. Most Japanese American soldiers already in the army were sent to Camp Robinson in Arkansas, where their guns were taken away, and they were made to perform menial tasks. Approximately 600 were discharged from the Army (Castelnuovo and Shimo, 2010).

[41] 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.

[42] 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).

the causes of low mainland enlistment rates.

These patterns are consistent with Japanese Americans living in Hawaii, who faced less discrimination, being more willing to volunteer. An alternative explanation is that the salience and immediacy of the war differed for Hawaii during March, 1943. To investigate this, we examine Chinese American enlistment in these two regions over the same period. Chinese Americans faced broadly similar degrees of formal and informal racial discrimination as Japanese Americans prior to WWII, but Chinese American soldiers served together with white soldiers and were not the target of additional discrimination during WWII. Figure A.5 shows that the mainland-Hawaii enlistment gap for Chinese Americans is constant before and after March 1, 1943.

Japanese American enlistment patterns in early 1943 is consistent with the main result that disenfranchisement and discrimination reduces volunteer enlistment. Ultimately, approximately 33,000 Japanese Americans fought for the U.S. during WWII, with 20,000 in the Army.[43]

6.2 Later in 1942

To identify the full influence of discrimination, the main analysis focuses on a narrow window of time during the early phase of U.S. participation in WWII, before the U.S. government undertook actions specifically aimed at recruiting Black men and other policies in response to the war. This section examines Black enlistment during the later parts of 1942 until volunteer enlistment was banned in December that year. A few 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. The gestures from the Army and U.S. government were mostly symbolic and very few substantive changes occurred. Jim Crow practices remained in place inside and outside the Army. The Army continued to be segregated and the discrimination faced by Black men was unchanged. Most Black men continued to be assigned to menial positions. A few Black combat units such as the Black Panthers and the Tuskeegee Airmen were formed, but they were segregated and commanded by white men. Similarly, wartime economic policies typically benefited white workers more than Black workers.

Despite the lack of substantive change, total Black volunteer enlistment rates begin to increase starting June, 1942. Figure 10 plots volunteer enlistment rates for Black men from counties with above and below median levels of discrimination. Twenty weeks after Pearl Harbor, Black enlistment rates begin to dramatically increase in counties with low discrimination, while they remain much lower in counties with high discrimination.

The response of Black enlistment to symbolic gestures that were not accompanied by substantive change suggests that intrinsic motivations play an important role in the decision to enlist. The fact that the positive response to government propaganda is driven by counties with low discrimination suggests that individuals who have faced relatively less discrimination are more easily persuaded. These results are consistent with the view that discrimination can undermine the strength of national identity. We do not have disaggregated

[43] See Appendix Figure A.6 for Japanese American enlistment until the end of the war. Enlistment rates increase slightly in the mainland when the government re-opened enlistment in May 1943, but the cumulative enlistment rates of the war remained higher from Hawaii.

measures of exposure to government propaganda or the many other changes in the later parts of 1942 to investigate this more rigorously. Thus, it is beyond the scope of our paper to be conclusive on this point.

6.3 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 in the NARA dataset. To be consistent with the main analysis, we focus on the 48 mainland states during the eight weeks before and after Pearl Harbor. Figure 11 plots volunteer enlistment rates for all races that our data allow us to identify – white, Black, Native American, Japanese and Chinese: all ethnic groups responded to the Pearl Harbor attack and increased volunteer enlistment.

The patterns across groups are interesting. Volunteer enlistment rates were lowest for Black men, who faced the most severe discrimination during this period. Chinese and Japanese Americans faced broadly similar discrimination in U.S. society prior to the war. The high enlistment rates of Japanese Americans are consistent with historians who argue that Japanese Americans, to prove their loyalty to the U.S. or to avoid retaliation, volunteered at high rates prior to being barred from the military.[44]

Native American enlistment rates after Pearl Harbor were similar to white (and Japanese) enlistment rates, despite having faced a long history of discrimination. This is consistent with the fact that during WWII, Native Americans were promoted as an embodiment of the American identity in government propaganda and popular culture and they served in integrated units (Bernstein, 1986). Native Americans also had low outside opportunities since many lived on economically deprived reservations (Sorkin, 1974).

7 Conclusion

The results in this study provide novel empirical support for recent theories of nation building by showing that, when a nation is under threat, political exclusion and discrimination can corrode support for the government. The Pearl Harbor attack triggered a surge in volunteer enlistment. However, the response from Black men was moderate relative to white men, especially from counties with high levels of racial discrimination. Although Japanese American men volunteered at the same rates as white men immediately after Pearl Harbor, those on the mainland did not respond to the Army's call one year later, nearly a year after they and their families were forcibly incarcerated in internment camps. In contrast, Japanese men from Hawaii, who were not interred, enlisted at much higher rates.

It is beyond the scope of the empirical exercise to be conclusive about exactly why discrimination undermines an individual's support for the government. The evidence suggests that extrinsic motivations were unlikely to be the only factor at play. Japanese men from the mainland enlisted less than those in Hawaii, even though they faced worse outside opportunities. The evidence suggests that intrinsic motivations were important. The discouraging effect of discrimination on Black enlistment was particularly pronounced in places that had more recently joined the Union, which is likely to influence the strength of a man's national identity but unlikely to affect the tangible trade-offs of enlisting. Also, Black enlistment from places with

[44] See Soennichsen (2011) for a detailed discussion. Saavedra (2021) 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.

low discrimination increased dramatically after the U.S. government embarked on a campaign to recruit Black men, even though there were few substantive changes to racial discrimination in the Army or U.S. society. The roles that extrinsic and intrinsic motivations play in the nation-building process are interesting questions for future research.

More generally, the dynamic relationship between nation building and discrimination is complex and multifaceted, and an exciting subject of future research. Extrapolating from recent studies of historical European contexts (Becker et al., 2019; Angelucci et al., 2022) suggests that Black involvement in WWII may have contributed to the eventual end of Jim Crow. Direct evidence is needed.

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Table 1: The Correlates of Discrimination

	Dependent Variable: Discrimination				
	(1)	(2)	(3)	(4)	(5)
	Mean	Std. Dev.	Standardized Coefficient	Obs.	R-squared
A. All					
Log Population	11.99	1.712	0.259***	2,306	0.788
Urban Share	0.599	0.323	0.247***	2,306	0.787
Black Population Share	0.099	0.144	0.466***	2,306	0.825
White Population Share	0.897	0.143	-0.447***	2,306	0.821
German (Ancestry) Population Share	1.723	1.725	0.151***	2,306	0.758
Italian (Ancestry) Population Share	3.205	4.139	0.149***	2,306	0.755
Japanese (Ancestry) Population Share	0.094	0.352	0.010	2,306	0.750
Distance from Pearl Harbor (1,000 km)	6.940	1.111	0.434***	2,306	0.752
B. Black					
Log Population	9.966	1.427	0.247***	2,303	0.807
Age	27.50	2.757	0.097***	2,306	0.766
Share Employed	0.807	0.101	0.045***	2,306	0.764
Log Occupational Income Score	2.833	0.172	0.030***	2,306	0.763
Share Employed in Manufacturing	0.157	0.097	-0.012	2,306	0.763
Share Employed in Farming	0.127	0.112	0.040***	2,306	0.763
C. White					
Log Population	11.95	1.734	0.269***	2,306	0.750
Age	31.42	2.628	0.249***	2,306	0.735
Share Employed	0.817	0.048	-0.020	2,306	0.710
Log Occupational Income Score	3.197	0.140	0.299***	2,306	0.772
Share Employed in Manufacturing	0.240	0.125	0.133***	2,306	0.720
Share Employed in Farming	0.057	0.061	-0.249***	2,306	0.750

Notes: Each row is one regression. 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. Significance levels: *** p<0.01, ** p<0.05, * p<0.1.

Table 2: The Effect of Discrimination on Black Volunteer Enlistment

	Dependent Variable: # Volunteers per 100,000 Eligible Men								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
				Baseline	Discrimination dummy	Disaggregated Income Scores		Unweighed	Omit States with incomplete information
Discrimination x Black x Post	-2.123	-2.058	-2.111	-2.811	-10.905	-2.621	-3.154	-9.853	-2.809
	(0.590)	(0.593)	(0.597)	(0.539)	(1.876)	(0.502)	(0.748)	(3.040)	(0.545)
Discrimination x Black	-0.312	-1.483	-1.494						
	(0.405)	(0.556)	(0.557)						
Black x Post	-14.169	-14.429	-14.443						
	(1.094)	(1.104)	(1.106)						
Black	-11.64	-10.397	-10.358						
	(0.643)	(0.781)	(0.785)						
Controls:									
State FE	Y	N	N	N	N	N	N	N	N
County FE	N	Y	Y	N	N	N	N	N	N
Week FE	N	N	Y	N	N	N	N	N	N
County-Week FE	N	N	N	Y	Y	Y	Y	Y	Y
Race-Week FE	N	N	N	Y	Y	Y	Y	Y	Y
Race-County FE	N	N	N	Y	Y	Y	Y	Y	Y
State x Race x Week FE	N	N	N	N	N	N	Y	N	N
Observations	71,992	71,992	71,992	71,992	71,992	71,992	71,992	71,992	62,180
R-squared	0.225	0.334	0.427	0.823	30.383	0.823	30.383	23.402	30.361
Adjusted R-squared	0.224	0.312	0.408	0.594	38.147	0.594	38.147	547.596	37.835
Mean Y	30.383	30.383	30.383	30.383	30.383	30.383	30.383	23.402	30.361
Std. Dev. Y	38.147	38.147	38.147	38.147	38.147	38.147	38.147	547.596	37.835

Notes: Observations are at the race, county and week level. Column (5) employs a dummy equal to one if the index of discrimination is above the median. Column (6) replaces the income scores with race-specific 1950 income scores. Column (8) replicates the baseline without weighing and column (9) drops the states whose counties report missing information (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 (except for column 8). Standard errors are clustered at the county level.

Table 3: The Effect of Discrimination on Black Volunteer Enlistment – Controlling for Draft Enlistment and Outside Economic Conditions

	Dependent Variable: # Volunteers per 100,000 Eligible Men									
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
						Week FE x County-Race-Specific Controls (see below)				
	Baseline	Race-County-Week Draft Rate	Lagged Race-County-Week Draft Rate	1940 Black/white share of officers x Week FE	Distance to the nearest military base x Week FE	Employment share	Age	Female labor force participation	Female labor force participation, rel. to eligible men	% women 15-35
Discrimination x Black x Post	-2.811	-2.811	-2.696	-2.900	-2.805	-3.130	-2.750	-2.884	-2.428	-2.904
	(0.539)	(0.540)	(0.540)	(0.523)	(0.548)	(0.652)	(0.553)	(0.595)	(0.573)	(0.542)
Observations	71,992	71,992	71,992	71,992	71,992	71,992	71,992	71,992	71,992	71,992
Mean Y	30.383	30.383	30.383	30.383	30.383	30.383	30.383	30.383	30.383	30.383
Std. Dev. Y	38.147	38.147	38.147	38.147	38.147	38.147	38.147	38.147	38.147	38.147

Notes: Observations are at the race, county and week level. Column (1) reports the baseline specification. From column (2) onwards, we replicate the baseline specification controlling for each county-race (county) control reported at the top of the column, interacted with week fixed effects (and race fixed effects). All regressions include county-week fixed effects, race-week fixed effects, and county-race fixed effects. 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 4: The Effect of Discrimination on Black Volunteer Enlistment – Controlling for Agriculture and Farm Ownership

	Dependent Variable: # Volunteers per 100,000 Eligible Men									
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
		Week FE x County-Race-Specific Controls (see below)			Week FE x Black x Controls (see below)					
	Baseline	# farms	People living in farms	% of land of white/black farmers	Farm size	Value of land in farm	Share of farms with mules or horses	# of horses or mules per farm	Share of farms with tractors	# of tractors per farm
Discrimination x Black x Post	-2.811	-2.911	-2.955	-2.694	-2.850	-2.753	-2.972	-2.849	-3.166	-3.145
	(0.539)	(0.576)	(0.601)	(0.782)	(0.543)	(0.624)	(0.633)	(0.542)	(0.753)	(0.739)
Observations	71,992	71,992	71,992	62,476	71,960	71,960	71,960	71,960	71,960	71,960
R-squared	0.823	0.823	0.823	0.855	0.822	0.822	0.822	0.822	0.822	0.822
Adjusted R-squared	0.594	0.594	0.594	0.666	0.590	0.590	0.590	0.590	0.590	0.590
Mean Y	30.383	30.383	30.383	29.521	30.243	30.243	30.243	30.243	30.243	30.243
Std. Dev. Y	38.147	38.147	38.147	36.864	38.311	38.311	38.311	38.311	38.311	38.311

Notes: Observations are at the race, county and week level. Column (1) reports the baseline specification. From column (2) to column (4), we replicate the baseline specification controlling for each county-race control reported at the top of the column, interacted with week fixed effects. From column (5) onwards, we replicate the baseline specification controlling for each county control reported at the top of the column, interacted with Black and week fixed effects. All regressions include county-week fixed effects, race-week fixed effects, and county-race fixed effects. 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 – Controlling for WWI and Civil War Veterans, Migration-induced Discrimination

	Dependent Variable: # Volunteers per 100,000 Eligible Men						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
			WWI veteran		Civil War veteran		
Discrimination x Black x Post	-2.811	-2.813	-2.604	-2.559	-2.428	-2.430	-2.275
	(0.539)	(0.540)	(0.658)	(0.710)	(0.546)	(0.547)	(0.723)
	[-0.044]	[-0.044]	[-0.041]	[-0.040]	[-0.045]	[-0.045]	[-0.035]
Share of Black veterans x Black x Post			-36.451	-43.110	12.055	12.00	
			(25.368)	(25.382)	(3.863)	(3.874)	
			[-0.035]	[-0.040]	[0.029]	[0.029]	
Share living with Black veteran x Black x Post			156.188		511.542		
			(80.725)		(350.543)		
			[0.022]		[0.006]		
Share living with Black veteran head x Black x Post				78.769		664.465	
				(40.953)		(578.226)	
				[0.036]		[0.005]	
Share living with Black veteran non-head x Black x Post				18.104		409.407	
				(32.675)		(423.340)	
				[0.007]		[0.003]	
Migration transmitted discrimination x Black x Post							-12.662
							(10.254)
							[-0.014]
Observations	71,992	70,820	70,820	70,820	48,940	48,940	70,820
R-squared	0.823	0.821	0.821	0.821	0.880	0.880	0.821
Adjusted R-squared	0.594	0.590	0.590	0.590	0.725	0.725	0.590
Mean Y	30.383	30.353	30.353	30.353	29.261	29.261	30.353
Std. Dev. Y	38.147	38.016	38.016	38.016	34.173	34.173	38.016

Notes: Observations are at the race, county and week level. All regressions include county-week fixed effects, race-week fixed effects, and county-race fixed effects. 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 6: The Effect of Discrimination on Black Volunteer Enlistment – Additional Controls

	Dependent Variable: # Volunteers per 100,000 Eligible Men							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Panel A. Control for Week FE x Black x Variable in Column Heading							
	Baseline	Net mig. rate 1930-40	Net mig. rate 1935-40	Passing for white	Tuskegee	Tulsa	Closest Refugee Camp	Closest 48ers city
Discrimination x Black x Post	-2.811	-2.745	-3.325	-2.785	-3.174	-2.618	-2.902	-2.606
	(0.539)	(0.542)	(0.565)	(0.552)	(0.728)	(0.566)	(0.552)	(0.594)
Observations	71,992	71,380	71,896	65,636	71,992	71,992	71,992	71,992
R-squared	0.823	0.823	0.823	0.843	0.823	0.823	0.823	0.823
	Panel B. Control for Week FE x Black x Variable in Column Heading							
	NAACP	Black Church	Dist. to Pearl Harbor	Years in the Union	Black Radio Ownership			
Discrimination x Black x Post	-2.414	-2.518	-2.767	-2.808	-2.621			
	(0.655)	(0.759)	(0.542)	(0.545)	(0.710)			
Observations	71,992	61,456	71,992	71,992	71,196			
R-squared	0.823	0.850	0.823	0.823	0.822			

Notes: Observations are at the race, county and week level. Column (1), Panel A, reports the baseline specification. From column (2) onwards, in both panels, we replicate the baseline specification controlling for each county control reported at the top of the column, interacted with Black and week fixed effects. All regressions include county-week fixed effects, race-week fixed effects, and county-race fixed effects. 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 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)
	X=South	X= NAACP Chapter in 1940	X=Black Churches in 1936	X=Distance to Pearl Harbor	X=Years in the Union	X=Distance from closest Military Base	X=Black Radio Ownership in 1930
	Panel A. X=0		**Panel B. X < Median Values**				
Discrimination x Black x Post [1]	-4.057	-2.335	-4.038	-1.390	-4.250	-2.444	-1.504
	(1.662)	(0.676)	(1.780)	(0.860)	(0.804)	(0.746)	(0.899)
Observations	31,816	65,452	30,320	35,144	36,596	36,580	35,616
R-squared	0.793	0.799	0.828	0.821	0.816	0.875	0.839
Adjusted R-squared	0.523	0.539	0.606	0.588	0.575	0.713	0.630
Mean Y	31.93	31.13	31.49	33.37	34.31	29.87	22.45
Std. Dev. Y	35.74	44.67	35.57	45.01	44.85	33.63	42.50
	Panel C. X=1		**Panel D. X > Median Values**				
Discrimination x Black x Post [2]	-1.669	-4.344	-1.928	-3.833	-2.024	-3.450	-3.625
	(0.819)	(1.864)	(0.610)	(0.609)	(0.657)	(0.762)	(1.092)
Observations	40,176	6,540	31,136	36,848	35,396	35,412	35,580
R-squared	0.870	0.912	0.876	0.824	0.833	0.765	0.814
Adjusted R-squared	0.703	0.797	0.716	0.597	0.613	0.459	0.572
Mean Y	26.74	29.37	25.98	28.52	27.68	31.48	32.38
Std. Dev. Y	43.08	26.98	35.40	33.03	32.46	46.37	36.55
			Panel E. Difference in Coefficients -- Panels A-C and Panels B-D				
[1] − [2] p-value	0.3721	0.8178	0.3016	0.0292	0.0143	0.3668	0.2327

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 county-race fixed effects. 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 8: Effects of Discrimination on Volunteers' Characteristics

	Dependent Variable: Volunteers					
	(1)	(2)	(3)	(4)	(5)	(6)
	Completed high school	Agriculture	Services	Manufacturing	Other	Unknown
Discrimination x Black x Post	-0.040	-0.043	-0.614	0.016	0.621	0.020
	(0.008)	(0.011)	(0.064)	(0.028)	(0.046)	(0.031)
Observations	1,082	1,082	1,082	1,082	1,082	1,082
R-squared	0.872	0.832	0.750	0.822	0.666	0.741
Adjusted R-squared	0.364	0.168	-0.239	0.119	-0.656	-0.283
Mean Y	0.630	0.0124	0.404	0.186	0.319	0.0792
Std. Dev. Y	0.173	0.0416	0.140	0.0978	0.118	0.115

Notes: Observations in columns are at the race, county and week level. All regressions include county-week fixed effects, race-week fixed effects, and county-race fixed effects. 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: Volunteer Enlistment – Black, White

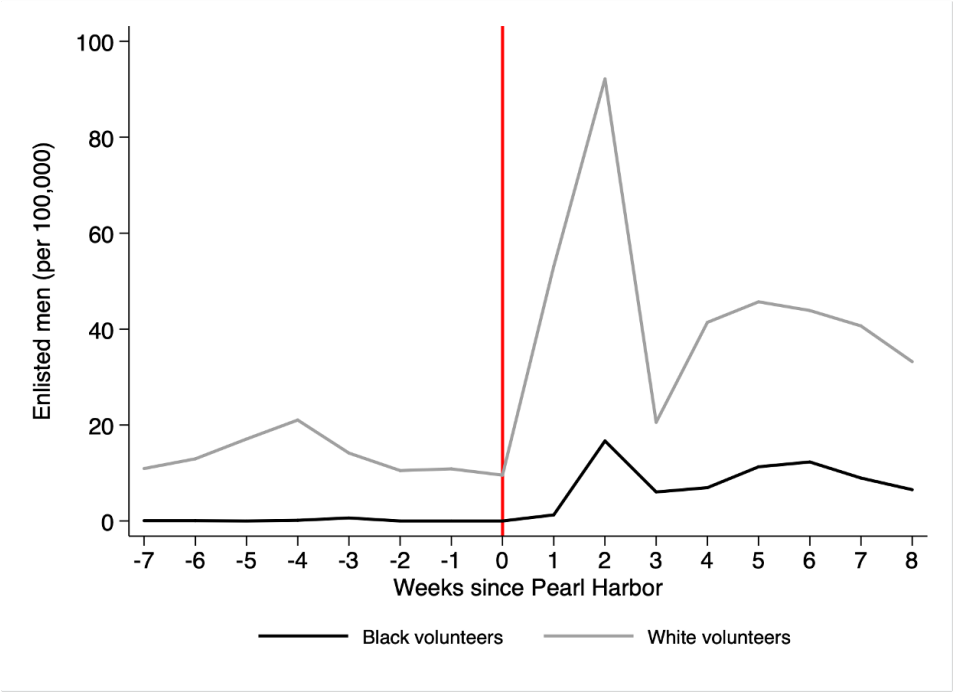


Figure 2: Volunteer Enlistment – Black, High and Low Discrimination

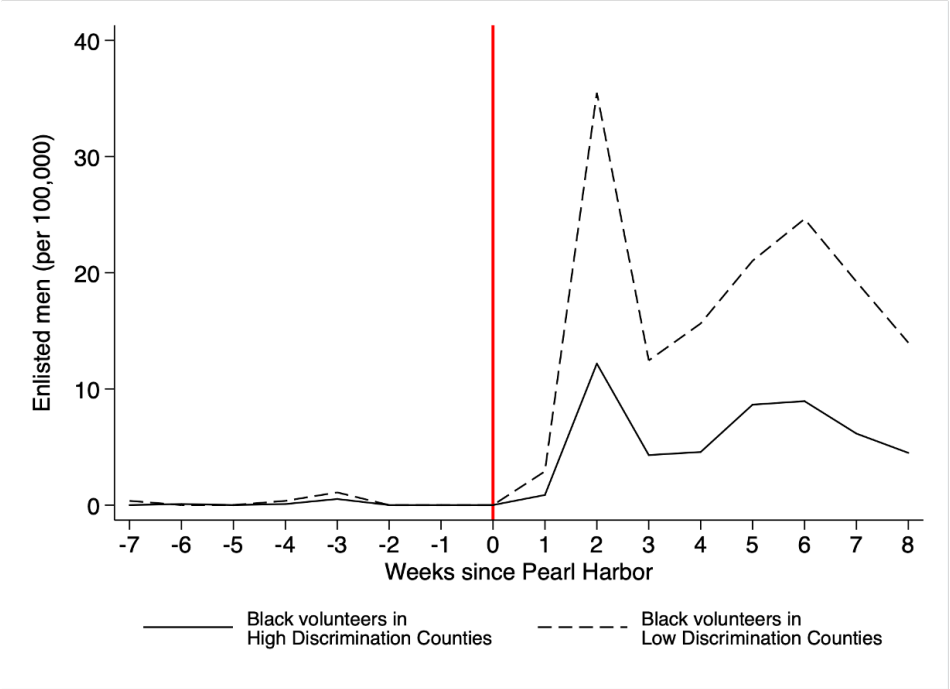


Figure 3: Volunteer Enlistment – White, High and Low Discrimination

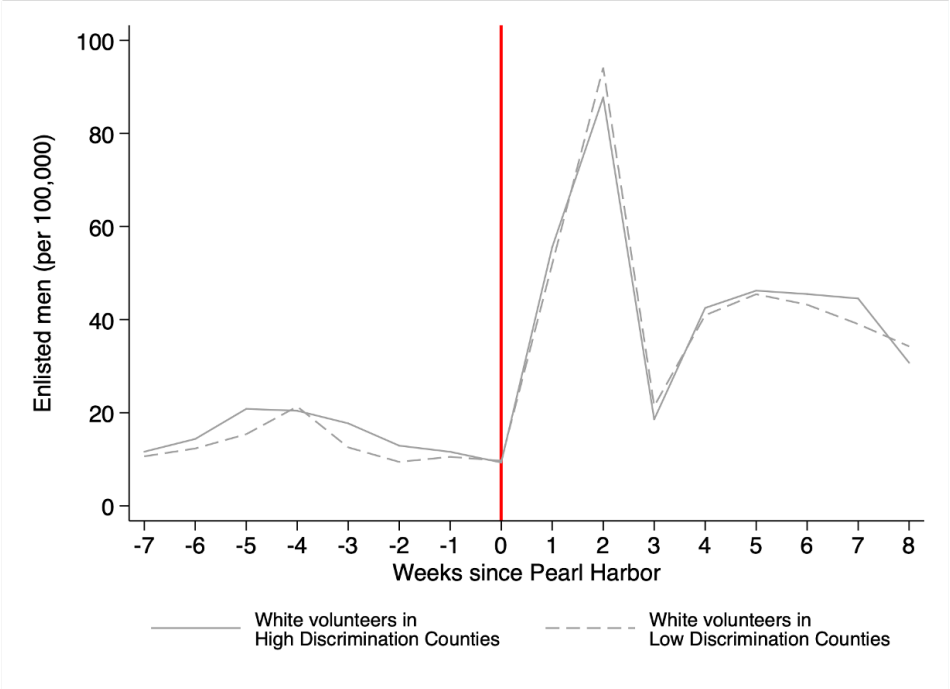


Figure 4: Volunteer Enlistment – Black and White, High and Low Discrimination

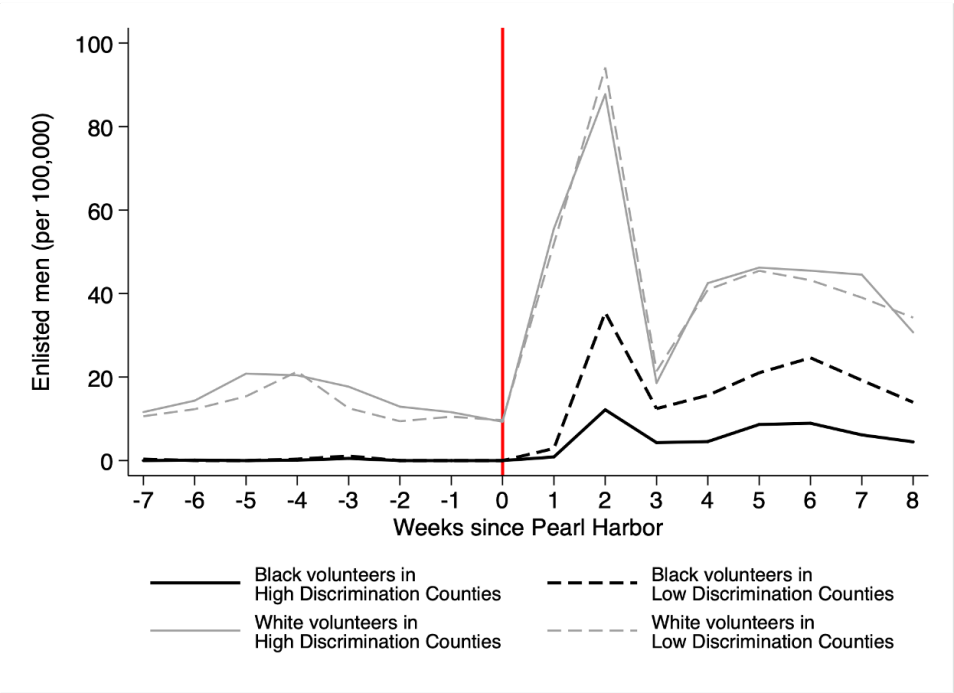


Figure 5: Share of News Coverage About the War in Local Newspapers

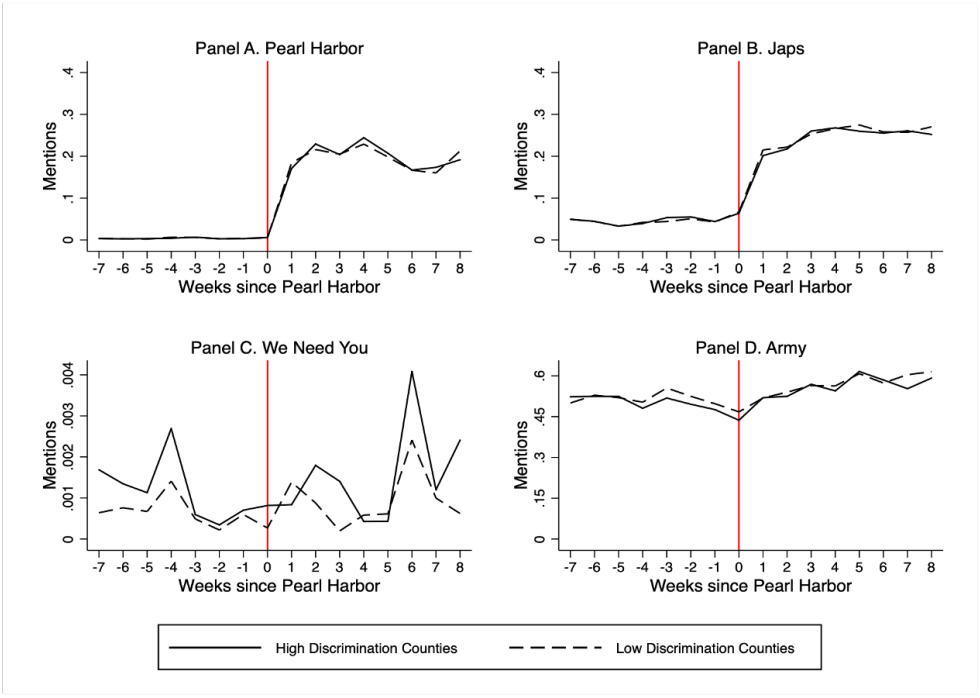


Figure 6: Racist Terms + "Negro"

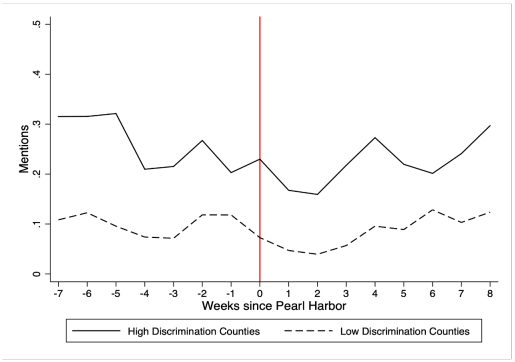
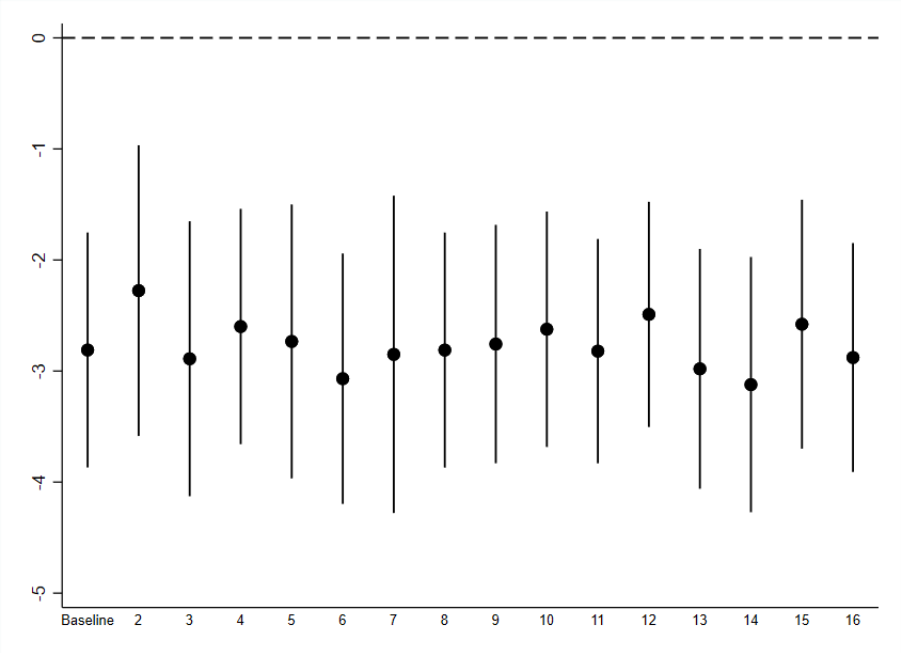


Figure 7: Baseline Estimates – Controlling for County-race-specific Employment Shares in Each Industry



Notes: The y-axis is the triple interaction coefficients and the 95% confidence intervals of 16 regressions. Each point is one regression. From left to right on the x-axis, we present: the baseline (1) and regressions that that control for employment share in each of the following category – (2) agriculture, (3) retail, (4) wholesale, (5) trade, (6) manufacturing, (7) construction, (8) forestry or fishing, (9) mining,; (10) service sector, (11) utilities sector, (12) finance or real estate, (13) professionals, (14) personal service, (15) entertainment service, (16) public administration.

Figure 8: Randomization Inference

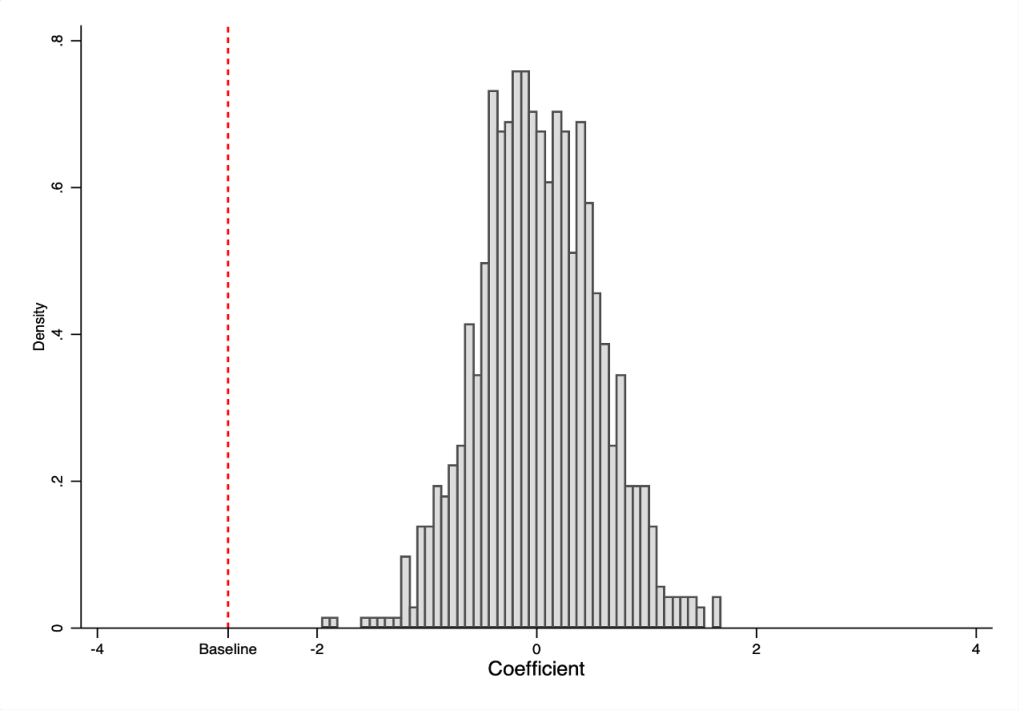


Figure 9: Japanese Enlistment

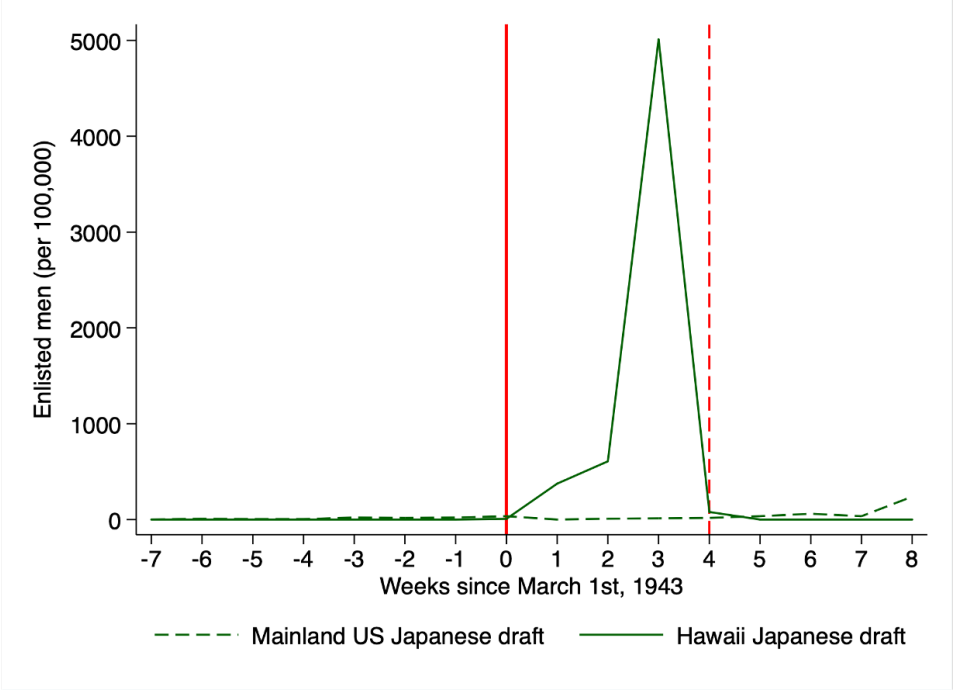


Figure 10: Black Volunteer Enlistment until December 1942

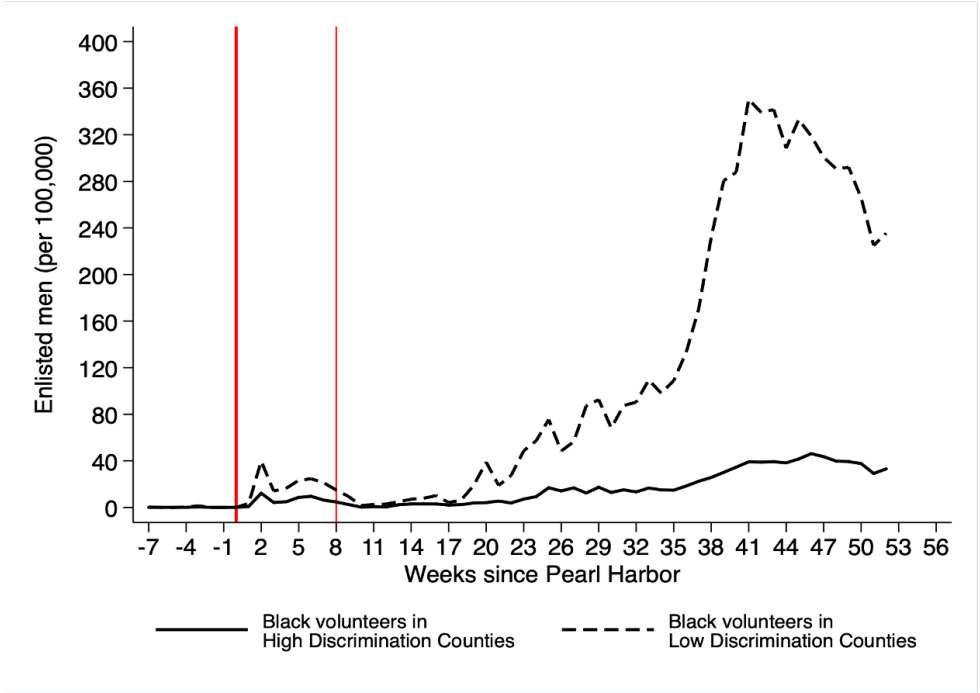
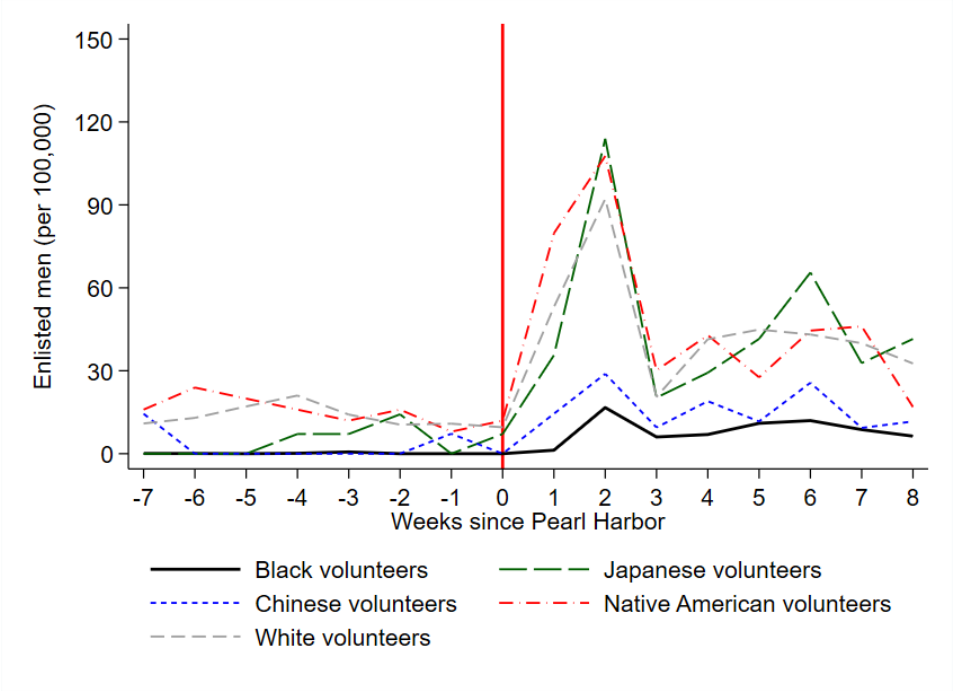


Figure 11: All Races



Online Appendix Not for Publication

Table A.1: The Variables used to Construct the Baseline Discrimination Measure

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)
Segregation index 1940	Likelihood of interracial interaction in residential communities.	Logan and Parman (2017)
White-Black educational level gap 1940	Difference in average educational level for white and Black American, 1940.	Author's computation from 1940 U.S. Census
White-Black log. occupational score gap 1940	Difference in average logarithm of occupational score for white and Black Americans in the labor force, 1940.	Author's computation from 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.2: Individual Level Summary Statistics

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	All counties			High Discrimination			Low Discrimination		
	Mean	Std. Dev	Obs	Mean	Std. Dev	Obs	Mean	Std. Dev	Obs
Panel A. Full Sample									
Volunteers	0.413	0.492	267,580	0.397	0.489	133,746	0.428	0.495	133,834
Draftees	0.587	0.492	267,580	0.603	0.489	133,746	0.572	0.495	133,834
Black	0.061	0.239	267,580	0.096	0.295	133,746	0.025	0.156	133,834
White	0.939	0.239	267,580	0.904	0.295	133,746	0.975	0.156	133,834
At least high school degree	0.522	0.500	267,580	0.502	0.500	133,746	0.541	0.498	133,834
Years of schooling	12.074	2.254	267,580	12.055	2.319	133,746	12.093	2.187	133,834
In agriculture	0.090	0.286	244,157	0.100	0.300	122,948	0.080	0.272	121,209
In manufacturing	0.215	0.411	244,157	0.189	0.391	122,948	0.243	0.429	121,209
In service and clerical occupations	0.324	0.468	244,157	0.359	0.480	122,948	0.290	0.454	121,209
At least some high school	0.786	0.410	267,580	0.775	0.417	133,746	0.797	0.403	133,834
In private grade	0.939	0.240	267,580	0.930	0.255	133,746	0.947	0.224	133,834
Age	23.623	3.097	267,580	23.666	3.129	133,693	23.579	3.065	133,782
Panel B. Black Men									
Volunteers	0.125	0.330	16,230	0.113	0.316	12,878	0.172	0.377	3,352
Draftees	0.875	0.330	16,230	0.887	0.316	12,878	0.828	0.377	3,352
At least high school degree	0.218	0.413	16,230	0.198	0.398	12,878	0.295	0.456	3,352
Years of schooling	10.613	1.986	16,230	10.493	1.968	12,878	11.074	1.987	3,352
In agriculture	0.161	0.368	12,353	0.194	0.396	9,682	0.041	0.199	2,671
In manufacturing	0.139	0.346	12,353	0.132	0.338	9,682	0.164	0.370	2,671
In service and clerical occupations	0.365	0.482	12,353	0.369	0.482	9,682	0.353	0.478	2,671
At least some high school	0.515	0.500	16,230	0.476	0.499	12,878	0.663	0.473	3,352
In private grade	0.989	0.106	16,230	0.987	0.111	12,878	0.993	0.083	3,352
Age	23.636	3.011	16,221	23.581	3.015	12,869	23.844	2.986	3,352
Panel C. White Men									
Volunteers	0.431	0.495	251,350	0.428	0.495	120,868	0.434	0.496	130,482
Draftees	0.569	0.495	251,350	0.572	0.495	120,868	0.566	0.496	130,482
At least high school degree	0.541	0.498	251,350	0.534	0.499	120,868	0.548	0.498	130,482
Years of schooling	12.169	2.238	251,350	12.222	2.292	120,868	12.119	2.186	130,482
In agriculture	0.086	0.281	231,804	0.092	0.289	113,266	0.081	0.273	118,538
In manufacturing	0.220	0.414	231,804	0.194	0.395	113,266	0.244	0.430	118,538
In service and clerical occupations	0.322	0.467	231,804	0.358	0.479	113,266	0.288	0.453	118,538
At least some high school	0.803	0.397	251,350	0.807	0.395	120,868	0.800	0.400	130,482
In private grade	0.935	0.246	251,350	0.924	0.265	120,868	0.946	0.226	130,482
Age	23.622	3.103	251,254	23.675	3.140	120,824	23.572	3.067	130,430

Notes: Observations are at the individual level. The sample includes men who were inducted during the eight weeks before and the eight weeks after Pearl Harbor. The data are reported in the Army induction cards. See the World War II Army Enlistment Records (NARA-AAD), 1938-1946.

Table A.3: The Effect of Discrimination on Black Volunteer Enlistment – Sensitivity to Alternative Discrimination Measures

	Dependent Variable: # Volunteers per 100,000 Eligible Men							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
		Discrimination Component						
	Baseline	Democratic vote share Presidential, 1900-1930	Democratic vote share Congressional, 1900-1930	KKK presence, 1915-1940	Number of lynchings up to 1939	Segregation index 1940	Gap years of schooling (white - Black)	Gap log. occscore (white - Black)
Panel A. Discrimination is the variable in the column heading								
Discrimination x Black x Post	-2.811	-0.205	-0.178	-2.039	-0.388	-10.202	-2.968	-46.264
	(0.539)	(0.038)	(0.029)	(1.721)	(0.165)	(4.932)	(0.720)	(6.833)
	[-0.044]	[-0.089]	[-0.091]	[-0.011]	[-0.021]	[-0.046]	[-0.060]	[-0.103]
Observations	71,992	71,992	71,992	71,992	71,992	71,992	71,992	71,992
Mean	30.383	30.383	30.383	30.383	30.383	30.383	30.383	30.383
Sd	38.147	38.147	38.147	38.147	38.147	38.147	38.147	38.147
Adjusted R-sq	0.594	0.594	0.594	0.593	0.593	0.593	0.593	0.594
Panel B. Discrimination is the principal components of all variables except the one in the column heading								
Discrimination x Black x Post	-2.811	-3.215	-3.039	-2.835	-3.691	-2.514	-2.961	-2.662
	(0.539)	(0.677)	(0.670)	(0.543)	(0.585)	(0.487)	(0.578)	(0.542)
	[-0.044]	[-0.046]	[-0.044]	[-0.044]	[-0.047]	[-0.038]	[-0.043]	[-0.040]
Observations	71,992	71,992	71,992	71,992	71,992	71,992	71,992	71,992
Mean	30.383	30.383	30.383	30.383	30.383	30.383	30.383	30.383
Sd	38.147	38.147	38.147	38.147	38.147	38.147	38.147	38.147
Adjusted R-sq	0.594	0.594	0.594	0.594	0.594	0.594	0.594	0.594
Panel C. Discrimination is the principal component of all of the variables in Panel A's column heading + the variable in Panel C's heading								
	Baseline	Black/White Wage Gap	Enslaved population (1860)	Employment share gap	Share in sugarcane	Share in cotton	Share in cotton and sugarcane	All additional variables
Discrimination x Black x Post	-2.811	-4.645	-2.070	-2.730	-2.809	-2.784	-2.762	-2.301
	(0.539)	(0.949)	(0.588)	(0.520)	(0.543)	(0.494)	(0.493)	(0.496)
	[-0.044]	[-0.043]	[-0.036]	[-0.043]	[-0.044]	[-0.047]	[-0.047]	[-0.043]
Observations	71,992	71,440	71,992	71,992	71,960	71,960	71,960	71,960
Mean	30.383	0.592	30.383	30.383	30.243	30.243	30.243	30.243
Sd	38.147	30.368	38.147	38.147	38.311	38.311	38.311	38.311
Adjusted R-sq	0.594	38.105	0.594	0.594	0.590	0.591	0.591	0.590

Notes: Observations are at the race, county and week level. All regressions include county-week fixed effects, race-week fixed effects, and county-race fixed effects. Column (1) reports the baseline specification. Panel A reports the results after replacing the discrimination index with one of its components specified at the top of the column. Panel B reports the results after dropping, one by one, each component mentioned at the top of the column. Finally, Panel C reports the results replacing the baseline discrimination index with different versions, each reported at the top of the panel. 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.4: The Effect of Discrimination on Black Volunteer Enlistment – Controlling for Industry Shares

	Dependent Variable: # Volunteers per 100,000 Eligible Men							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
		Control for Week FE x county-race share of employment in Column Heading						
Panel A.	Baseline	Agriculture	Retail	Wholesale	Trade	Manufacture	Construction	Forestry or Fishing
Discrimination x Black x Post	-2.811	-2.276	-2.889	-2.599	-2.734	-3.069	-2.85	-2.811
	(0.539)	(0.667)	(0.631)	(0.540)	(0.629)	(0.575)	(0.729)	(0.540)
Observations	71,992	71,992	71,992	71,992	71,992	71,992	71,992	71,992
Mean	30.38	30.38	30.38	30.38	30.38	30.38	30.38	30.38
Sd	38.15	38.15	38.15	38.15	38.15	38.15	38.15	38.15
Adjusted R-sq	0.594	0.595	0.594	0.595	0.594	0.594	0.594	0.594
Panel B.	Mining	Service Sector	Utilities Sector	Finance / Real Estate	Professionals	Personal Service	Enterteinment Service	Public Administration
Discrimination x Black x Post	-2.757	-2.624	-2.821	-2.49	-2.981	-3.122	-2.579	-2.878
	(0.547)	(0.541)	(0.515)	(0.517)	(0.551)	(0.586)	(0.571)	(0.525)
Observations	71,992	71,992	71,992	71,992	71,992	71,992	71,992	71,992
Mean	30.38	30.38	30.38	30.38	30.38	30.38	30.38	30.38
Sd	38.15	38.15	38.15	38.15	38.15	38.15	38.15	38.15
Adjusted R-sq	0.594	0.594	0.594	0.594	0.594	0.595	0.594	0.594

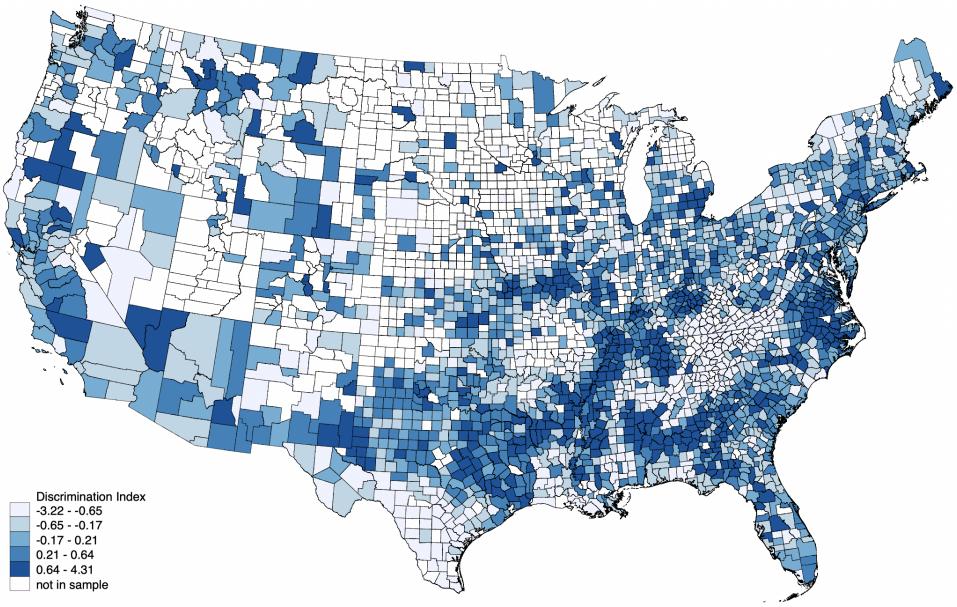
Notes: Observations are at the race, county and week level. Column (1)reports the baseline specification. From column (2) onwards, we replicate the baseline specification controlling for each county-race control reported at the top of the column, interacted with week fixed effects. All regressions include county-week fixed effects, race-week fixed effects, and county-race fixed effects. 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 – Sensitivity to Alternative Standard Errors

	Dependent Variable: # Volunteers per 100,000 Eligible Men						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Baseline	Conley adjustment spatial cutoff: 2000km	Conley adjustment spatial cutoff: 3000km	Cluster at the commuting zone level	HAC - 2 lags	HAC - 7 lags	HAC - 14 lags
Discrimination x Black x Post	-2.811	-2.811	-2.811	-2.811	-2.811	-2.811	-2.811
	(0.539)	(0.361)	(0.472)	(0.656)	(0.378)	(0.410)	(0.462)
Observations	71,992	71,992	71,992	71,992	71,992	71,992	71,992
Mean Y	30.383	30.383	30.383	30.383	30.383	30.383	30.383
Std. Dev. Y	38.147	38.147	38.147	38.147	38.147	38.147	38.147

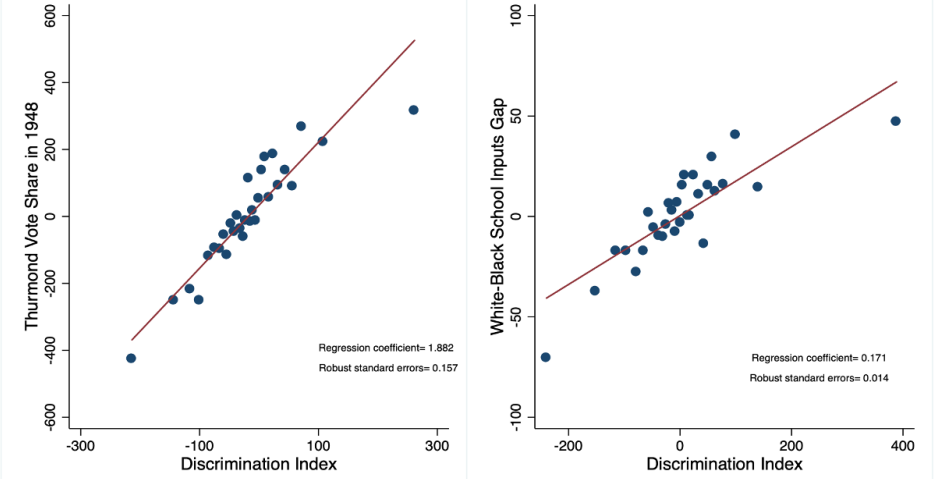
Notes: Observations are at the race, county and week level. Column (1) reports the baseline specification. Robustness exercises are noted at the top of each column. All regressions include county-week fixed effects, race-week fixed effects, and county-race fixed effects. The regressions include all lower order interaction terms and are weighed by the 1940 population of eligible men in each county and race.

Figure A.1: Discrimination (within State Variation)



Notes: The figure plots the county-level discrimination index after demean 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: Black Volunteer Rates before Pearl Harbor

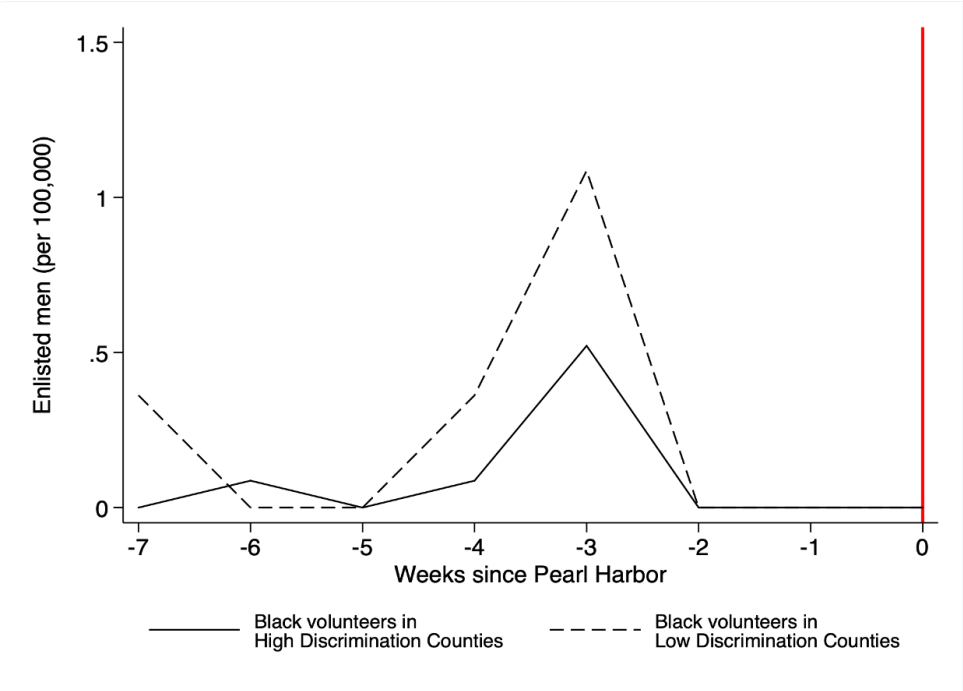


Figure A.4: White Volunteer Rates before Pearl Harbor

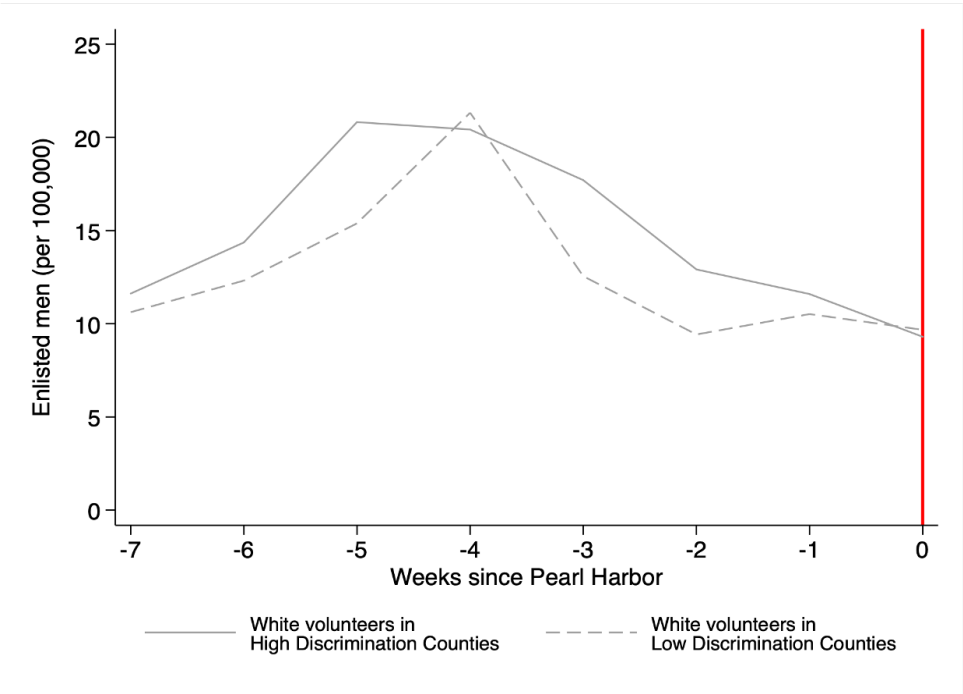


Figure A.5: Chinese Enlistment

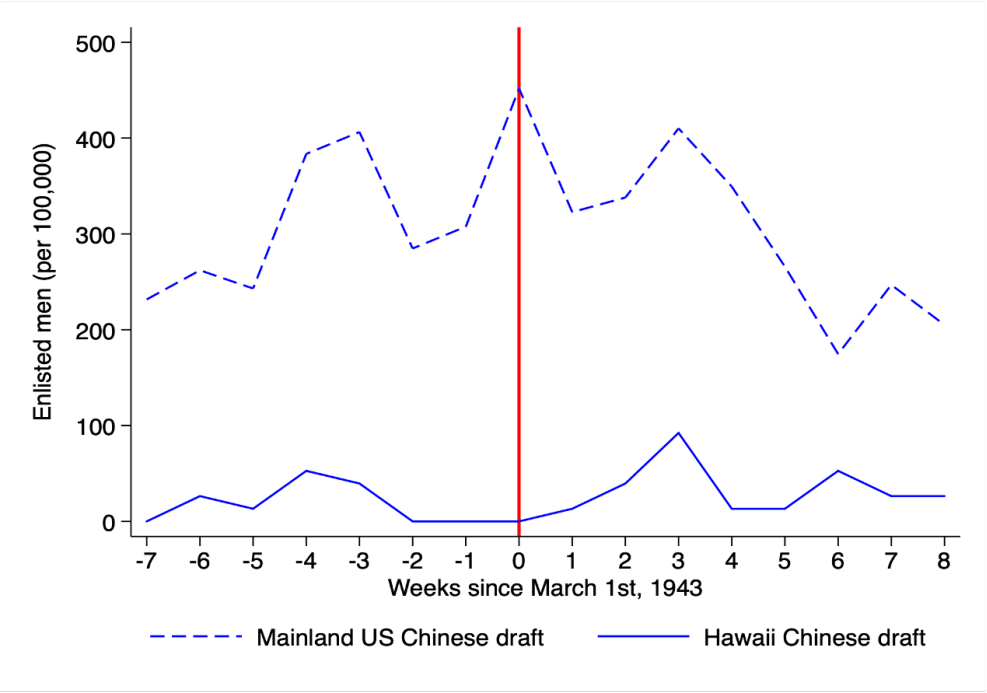


Figure A.6: Japanese Enlistment until the end of WWII