Residential Segregation: The Mitigating Effects of Past Military Experience*

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Abstract

This paper uses the case of military service to test the premise of the social contact theory--that minority-majority social contact will lead to higher levels of racial tolerance and integration (Allport 1954, Robinson and Preston 1976; Sigelman and Welch 2001). As the only large-scale institution in which African Americans are over-represented and in which blacks and whites come into frequent and prolonged contact with one another, the military may be one of the most well situated US environments in which to test social contact theory. In this paper we ask whether there are long term implications for race relations resulting from military service. Using restricted data from the fourth follow-up to NELS, this paper is the first to examine whether white veterans are more likely than white civilians to reside in racially integrated neighborhoods. We find that controlling for a variety of individual, household, and metropolitan level factors, prior military service is associated with residence in neighborhoods with fewer non-Hispanic whites and greater overall diversity.

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Introduction

A well-known theoretical premise in the social sciences is that minority-majority social contact will lead to higher levels of racial tolerance and integration (Allport 1954, Robinson and Preston 1976; Sigelman and Welch 2001). The military may be one of the most well-situated US environments in which to test social contact theory. It is the only large-scale institution in which African Americans comprise a substantially larger percentage of the population than they do the civilian population. It is also the only large-scale institution where blacks and whites come into frequent and prolonged contact with one another as both employee and neighbor. Research among active-duty military members has shown support for social contact theory (Moskos and Butler 1996; Butler and Wilson 1978). In this paper we ask whether there are long term implications for race relations resulting from military service. Specifically, we examine whether white veterans are more likely than white nonveterans to reside in racially integrated neighborhoods. Residential racial segregation has been described as the "linchpin of US racial inequality today" (Massey and Denton 1993). Given that the military is the single largest employer in the United States, it of particular interest to examine whether military experience is associated with later residential settlement patterns.

Background

Social Contact Theory and the Military

Racial isolation is generally believed to fuel and perpetuate stereotypes and racist beliefs. The social contact hypothesis predicts the opposite--that interracial interaction will lead to more positive racial attitudes. Accumulated evidence has shown this to be generally true when three general preconditions of contact are met: (1) that the groups be of equal status, or a majority group working with high status minority group members; (2) that the situation in which contact takes place is voluntary; and (3) that the groups are working closely together toward a set of common goals (Barnard and Benn 1988; Hewstone and Brown 1986; Amir 1969). While most studies of social contact have focused on attitudinal change, there has also been evidence that interracial contact brings about behavioral change as well (Emerson et al
For instance, a major drawback in evaluating the efficacy of the hypothesis is the potential for self-selection of more open-minded individuals into cross-racial contact situations (Jackman and Crane 1986). A solution is to limit analyses of interracial contact to those scenarios that are least likely to be elected into; however, doing so violates item (2), above, which stipulates that voluntary contact best predicts the social contact hypothesis. Hence, an ideal condition of the theory is also its greatest challenge.

The military offers an appropriate platform for evaluating social contact theory according to the above preconditions. Military service is voluntary; yet at the same time it offers so many enlistment incentives that interracial friendship is an unlikely motivator of service. Military service fits the remaining ideal criteria quite well. African Americans tend to stay with military service longer than whites do, and thus enjoy equal, and oftentimes higher, enlisted rank as a result. Furthermore, the primary goal of the military apparatus is to create a sense of unitary purpose in working toward the common defense. At the extreme, military personnel are expected to sacrifice their lives for one another in the line of duty. The nature of military service, when compared to civilian work, is aimed at promoting high levels of bonding on the job. Finally, as a total institution in the Goffmanian sense (1961), the degree of interracial contact in the military is extreme—not only on the job, but at the mess hall, in the barracks, in on-base neighborhoods, etc.

The military setting has additional advantages as a site for interracial social contact. For one, the African American population in the armed forces is disproportionately large. While comprising only 12% of the US population, blacks in the Army for example, comprise 20% of the active duty population (DMDC 2011). Institutions of higher education are the only other American cultural another arena in which high levels of interracial contact occur. Since blacks usually comprise less than 10% of the student population on most campuses, even if there were no selection at all in friendship networks we would not expect to see a large percentage of blacks among white friendship groups. Of course, there is selection
into friendship, and once preferences are accounted for the actual percentage of out-group friends for whites tends to be lower than would be expected by chance. Recent research utilizing the National Longitudinal Survey of Freshmen (NLSF) reported that 7% of white student’s friends in their first year were black, while the average campus percent black was 10.6% (Fischer 2008). Interracial contact, in other words, for most white students on most white campuses will be somewhat limited.

Interracial contact within the military, on the other hand, is more pervasive. Moreover, the background characteristics associated with majority groups who enlist in the military serve to mitigate a major weakness of social contact theory. Military enlistees disproportionately have only a high school degree and are from the rural South, factors associated with more conservative views. Indeed a recent survey of veterans indicate that they are significantly more likely to vote Republican and to consider themselves more conservative than their non-military counterparts (Pew 2011). If service in the armed forces selects for more conservative, potentially less racially-open whites to begin with, the military may be one of the best scenarios for exploring the applicability of the social contact hypothesis, and is thus deserving of further investigation.

There is positive evidence for the social contact hypothesis in the US military, both historically and presently. Testimony from Project Clear, when the US army first began to desegregate troops in Korea, showed evidence for positive attitude change among whites and blacks (Bogart et al 1951). This process took place not only before the transition to the all-volunteer military, and thus under conscripted conditions, but also when societal desegregation itself was a newly-enforced experiment (a violation of the ideal conditions stipulated in the social contact hypothesis). The bonding context of the Korean War may have overridden the drawback of involuntary contact. Today black and white soldiers rate race relations as notably better in the military than in civilian society (Moskos and Butler 1996). High interracial marriage rates, also lends support to the operation of the social contact hypothesis in the military (Jacobson et. al 2003).
Residential Segregation and the Military

"I lived in Navy housing all my life, and we didn't pick who we lived next door to."

- Crockett 2000

The military’s lack of racial segregation is a significant departure from civilian life today, perhaps measured best in terms of residence. Despite some change following civil rights reform in the 1960s, the vast majority of black and white civilians continue to live in very separate worlds. Neighborhood segregation carries over to local schools and community organizations; and shapes the acquisition of human, cultural and social capital (Massey and Denton 1993). In contrast, all on-base military housing is explicitly racially integrated (United States Commission on Civil Rights 1963). The history behind this deserves emphasis because it explains how it came to be that even off-base residential areas not directly subject to military policy came to be racially integrated.

Desegregation of localized areas around military bases did not originate as a trickle down effect of the military’s own policies, but rather as a fiat issued by the Department of Defense. Many military bases were (and still are) located in the deep South, areas which actively resisted the Civil Rights movement. Black soldiers who lived off base were systematically denied quality housing by local landlords and forced to live in race-segregated areas of town. From the DOD’s standpoint, the isolation of soldiers from easy access to base negatively impacted readiness. One instance frequently invoked was violation of tactical missile protocol, whereby servicemen were required to live within a certain distance of the missile site. Public bus systems required black soldiers to move to the back of the bus upon crossing from the military base into city limits. Where bases lacked their own school system, black soldiers’ children were subject to local school segregation policies. Black soldiers also faced inferior service or were even denied service at various town retail and dining establishments.
As early as 1961, the Department of Defense began taking action against local prejudice. It first sent out a national memorandum outlining steps for how local commanders were expected to secure voluntary compliance with desegregation of public accommodations (United States Commission on Civil Rights 1963). It then initiated an active “off-limits” policy, where the military was to deny business to local establishments that upheld segregationist policies. All off-base real estate leased by the military required a nondiscrimination clause, and those refusing to write one in were terminated as DOD lessees. As of 1968, 90% of all housing facilities in a nationally representative survey had certified their compliance with the military’s stipulations (Hershfield 1985). This was particularly the case in regions where business generated by the military comprised a large proportion of the local economy.

In 1962, the Secretary of Health, Education and Welfare ruled that all children living on federal property must be permitted to attend the closest local schools regardless of race or else face federal funding cuts. This affected black children living on base only, but in 1963 military commanders were instructed to “ascertain local procedures for obtaining nonracial assignments to public schools and to advise military parents accordingly” (United States Commission on Civil Rights 1963, p. 201). Additionally, soldiers were not permitted to take part in segregated local events (on-or off-duty), and commanders began dispatching racially-mixed patrols and ceremonial honor guards for duties in the community (Sutton 1971).

Many were outraged by local integration efforts on the part of the military. Barry Goldwater described DOD policy as “tactics of a police state” (Raymond 1963). Carl Vinson, a Georgia Democratic senator, accused the military of attempting “to impose a new social order throughout the United States through the use of our armed forces” and called for a bill to court-martial any officer complying with the DOD’s off limits injunction (Hunter 1963). Some military base communities retaliated against what had become known as the McNamara Directive. In Louisiana, Leander Parish pushed through an ordinance banning all uniformed military personnel from drinking establishments in Palquemines County (Langguth
1963). Undaunted, desegregation directives continued to be issued by the DOD. A year later, the military ordered the purging of all contracts with institutions of higher education that discriminated on the basis of race in admission or in treatment of students (New York Times 1964). At the time 100,000 soldiers were enrolled in classes at civilian colleges and continuing education centers through the DOD’s education benefits program. A year later the military extended this policy to all high schools or colleges with R.O.T.C. programs (New York Times 1965).

The institutional aspects of today’s military may not be as all encompassing as they once were, but its legacy of desegregation both on and even off base seems to have stuck. In the 1990s, research found that metropolitan areas with a strong military presence have the lowest levels of African American residential segregation in the United States (Defina and Hannon 2009; Farley and Frey 1994). This is still true today. In 2010, metropolitan areas with military concentrations continue to have significantly lower than average levels of segregation. Recognizing this fact, researchers examining trends in segregation routinely control for ‘military specialization’ in models examining segregation and changes in segregation over time (see for example, Friedman, Tsao, and Chen 2013; Logan, Stults, and Farley 2004; Wilkes and Iceland 2004). Given the negative outcomes associated with racial segregation that affect blacks soldiers and their families at all income levels, its absence in the military likely translates to a more equitable distribution of resources and networks, as well as to greater overall social cohesion among the races in the military community.

Given the high level of racial integration in the military and the evidence that military service is associated with improved interracial attitudes, this paper examines whether this previous social contact and improved attitudes has lasting effects. Specifically, we explore whether non-Hispanic whites with previous military experience are more likely to live in integrated neighborhoods (net of other characteristics) than those with no military experience. As a recent collection of research on the life

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1 For instance, Jacksonville, NC had a black-white dissimilarity score of 27.5 in 2010 and Fayetteville, NC’s score was 30.7 compared to non-military associated cities, like Asheville for example, with a dissimilarity level of 66.2 or New York City, with a dissimilarity level of 85.3 (CensusScope 2011).
course perspectives of veterans makes clear, very little research has been done on the geographic mobility patterns of veterans (Bailey 2013). We do know that older veterans are more likely to settle in geographical regions with proximity to a Veterans Administration health facility (McCarthy et al. 2007). We also know that veterans of all ages have higher than average residential mobility rates compared to nonveterans, and tend to move to larger metro areas upon separation from service (Bailey 2011; Plane, Henrie and Perry 2005). There is no information on the racial composition of their residential settlement and this paper seeks to address this gap in knowledge.

**Data and Methods**

To explore the impact of military service on adult neighborhood outcomes, we used the restricted version of the National Educational Longitudinal Study (NELS) and data from the 2000 Census. The baseline NELS is comprised of a nationally representative sample of 8th graders who were surveyed in the spring of 1988. A follow-up sample of students from this baseline study was interviewed in four subsequent survey waves in 1990, 1992, 1994, and 2000. The current study focuses primarily on non-Hispanic whites from the fourth follow-up study conducted in 2000 in which most respondents were age 26. The restricted data includes zip codes for the 4th follow-up respondents, which we merge with the 2000 Census.

We have two primary dependent variables for our two sets of analysis: 1) percent non-Hispanic white and 2) the overall racial diversity of the zip code in which respondents resided in 2000. Racial diversity is measured as the entropy of the zip code, calculated with the following formula:

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Entropy = \sum_{i=1}^{n} p_i * \log\left(\frac{1}{p_i}\right)
\]

where \( p_i \) is the percent of each racial/ethnic group in the zip code summed over \( n \) racial/ethnic groups in the zip code (Theil and Finizza 1971). The maximum value is \( \log(n) \), representing maximum diversity. The minimum value is 0, representing no diversity (i.e. only one group is present). While the use of
census tracts is more common in neighborhood research, zip code level measures have been used in prior studies to approximate neighborhoods (eg. Britton and Goldsmith 2013; Emerson, Chai, and Yancey 2001). Table 1 shows the average diversity of the neighborhoods for civilians and veterans in the first row. Civilians lived in slightly less diverse neighborhoods compared to veterans (.58 versus .60). The largest variation was in the percent same group, which was 76.5% for veterans and 79% for civilians. Relative to civilians, veterans had slightly higher percentages of blacks and Hispanics in their neighborhoods.

*Individual level factors*

Our key independent variables concern veteran status, which we construct from two questions asked in the 4th follow-up: whether the individual has served in the armed forces and whether they are currently serving. We code respondents who have served in the military but are non-active as ‘veterans’, which represents about 4% of our non-Hispanic white sample. Those who indicate they are currently serving are coded as ‘active duty’. Because those who are currently serving are necessarily exposed to more diverse communities, whether in military quarters or in the more racially integrated communities outside of military bases, we have chosen to exclude them from our study. We wish to examine the independent residential behaviors of individuals who are no longer subject to military policies. This reduces our sample size by about 130 respondents.

Residential choices are shaped by a variety of factors, including life stage and socioeconomic status. The descriptive statistics for the variables used in our analysis are reported separately for civilians and veterans in Table 1. All of our respondents are approximately 26 years of age as of the 4th follow-up, but they do vary in terms of their gender. Whereas a little under half of the civilians are male (46%), males account for the vast majority of veterans (87%). We also control for life-stage and economic characteristics that might influence locational decisions. Individuals who are married, own homes, and especially those with children in the household often more sensitive to ‘quality’ of a neighborhood. Prior research shows that racial composition has both conscious and subconscious effects on the perceptions of neighborhood quality (Krysan et al. 2009). Veterans are similarly married as civilians (41% versus
42%), but slightly more report the presence of children in their household (64% versus 53%). For both groups, about a third own their homes (33% of civilians versus 30% of veterans).

There are some individuals in the fourth wave sample who are residing with their parents and can thus be presumed to not be making independent decisions about locational characteristics. This was the case for 13% of civilians and 15% of veterans. Finally, education has a likely impact on neighborhood outcomes. People with higher levels of education are more likely to be employed and earn higher levels of income in their jobs than those with less education. Based on this we might expect more educated individuals to have a higher percent white and less racial diversity in their neighborhoods. However, educational is also a liberalizing force for many. Research on racial attitudes finds that those with higher levels of education express more positive racial attitudes (Krysan 2011; Schuman et al. 1998). Furthermore, the diversity that individuals experience in college might translate positively into the social ties that are made as adults (Emerson, Kimbro, and Yancey 2002). While more veterans than civilians have some college attainment, many more civilians have a college degree and far fewer have only a high school degree.

We also control for neighborhood racial composition in respondent’s childhood using the self-rated percent same race in neighborhood growing up, which respondents were asked to estimate in the fourth follow-up. Civilians report growing up in a neighborhood with an average 83.9% same group (e.g. white), while veterans report a slightly slower percent same-race in their childhood neighborhoods (81.7%). In models not shown, we control for the zip code of residence in the first wave survey showing even less difference between civilians and veterans in their racial composition of their childhood neighborhood (90% versus 89%). However, because not all of the fourth follow-up has valid zip code information from the baseline, we do not include this variable in the model in the interest of maximizing our sample. Self-ratings are, of course, subjective, but do correlate highly with the zip code percent white.
Metropolitan level controls

Of course, all things being equal, neighborhood racial composition is going to be somewhat dependent on the characteristics of the metropolitan area in which the respondent is residing. In addition to the racial composition of the CBSA of residence, we also include several factors that have been found in prior research to be related to levels of metropolitan segregation such as the percent employed in the military, the percent enrolled in college, the percent of housing that is new, and the percent of population residing in the suburbs.

Findings

The results from our model predicting neighborhood percent non-Hispanic white are shown in Table 2. The first model shows the effect of military service, which is negative and significant for both veterans and active duty military. Veterans are predicted to have 2.6% fewer non-Hispanic whites in their neighborhood than those who have not served. The second model adds educational attainment, controlling for which results in an even stronger effect of veteran status on predicted non-Hispanic white (B=−.040). Higher levels of education are associated with lower percentages of non-Hispanic white in the zip code of residence, which lends support to theories relating to the liberating effects of education. This could also be interpreted as further positive long-term evidence for the contact hypothesis since college campuses tends to one of the more diverse settings experienced by many non-Hispanic whites.

The third model adds individual and household controls to the model. While gender has no significant effect on neighborhood, those who are married are predicted to reside in neighborhoods with a higher percent white (B=.029). Net of marital status, homeowners are predicted to have 3.4% higher percent white in their neighborhoods compared to non-homeowners. These findings lend support to the importance of life stage and long-term investment on locational decisions, though curiously the presence
of children is *not* significant here. Those who are living with their parents are also predicated to have a higher percentage white in their neighborhoods (B=.030).

The final model adds metropolitan level controls. The overall diversity of the CBSA has a strong and negative relationship to the percent non-Hispanic white (B=-.320). Living in a CBSA with a larger military presence and with more new housing are also associated with fewer non-Hispanic whites in the neighborhoods of non-Hispanic whites, though these effects are more modest in magnitude than the effect of diversity. The addition of these factors slightly decreases the coefficient for veteran status, but it is still significant. However, this is not the case for the effects of education, which become non-significant with the addition of metropolitan controls.

Table 3 shows the results of the models predicting the diversity in the neighborhoods of non-Hispanic white young adults. The baseline model including only veteran status shows no significant difference in neighborhood diversity for veterans compared to civilians. Once we control for other individual level characteristics, however, veteran status does appear to be related to residence in more diverse neighborhoods. Model 2 adds educational status which shows significantly higher neighborhood diversity for those with some college (B=.081) and a college degree or higher (B=.16) compared to those with a high school diploma or less. Veterans are predicted to live in neighborhoods with a diversity score .057 points higher than civilians once education is controlled.

The addition of individual and household factors does not change these basic relationships (see Models 3 and 4). Respondents who are married, have children in the household, and/or are homeowners have significantly lower predicted neighborhood diversity. Similarly, living with one’s parents is also associated with residence in less diverse neighborhoods. The final model adds in metropolitan characteristics. As we saw in the previous model, CBSA diversity is strongly related to neighborhood composition (B=.627). The percent armed forces in the metropolitan area, the percent enrolled in
college, and the percent of housing built in the 1990s are also positively related to neighborhood diversity for respondents. On the other hand, those who grew up in neighborhoods with higher percentages of same race neighbors lived in slightly less diverse neighborhoods as adults net of other factors (B=-.002). Once these metropolitan characteristics are controlled for, veteran status becomes only marginally significant (B=.02).

**Discussion**

This paper has examined the neighborhood diversity of veterans compared to civilian young adults to test a basic premise of the contact hypothesis: that prolonged interracial contact will have a positive effect on long-term intergroup relationships. Most tests of the contact hypothesis focus on outcomes that are more immediately related to ‘exposure’ to diversity, such as the effect of residing on a diverse college campus on the racial composition of friendship groups. Of tests that have a longitudinal component, the outcomes being measured are usually friendship diversity or racial attitudes. Locational decision-making is a strong test of the contact hypothesis due to the fact that a) individuals (typically) only have one residence at a time b) the semi-permanence of such decisions (eg. even if one is renting mobility is not completely fluid), and c) the wide variety of ways in which where one lives affects their day to day life and interactions. For these reasons, it is especially significant that we are seeing a longer-term impact of being a veteran on the choice of neighborhoods that are less-white and with greater overall diversity. It should also be noted that our sample of veterans is relatively small (less than 5% of our sample), thus making it even more difficult to pick up on a significant effect and so the significance of the relationship we evaluate is likely to be underestimated.

This paper is a first step in assessing the impact of military service on residential integration as a possible long-term effect of intensive social contact setting. But there are some possible alternatives to explain why white veterans settle in less race-homogenous neighborhoods. Thinking back to findings showing that older veterans sometimes settle in areas to better access VA healthcare, it may be that younger veterans are settling near military bases because they prefer military communities or retain some
base-access benefits. Thus, their own greater neighborhood diversity may simply reflect the greater diversity of military communities. In ongoing analyses, we will assess proximity to a military base in the resettlement patterns of veterans by interacting veteran status with the percent of armed forces representation in their metropolitan area.

Another factor potentially influencing our findings is the fact that interracial marriage is more common in the military. If more white veterans than civilians are married to non-white partners with multiracial children, they may undergo a differing decision-making process as regards the preferred racial composition of their neighborhoods. We will thus examine the racial identity of marital partners and children in future analyses.

It may also be that veterans grow up in more diverse neighborhoods to begin with and Table 1 indicates that this might be the case. This could be related to childhood differences in SES. But it could also relate to the intergenerational transmission of military service, where children of soldiers are themselves likely to enlist in the military. Children who grow up in the military are exposed to the same sorts of racial integration and diversity in their neighborhoods and schools as their parents experience, and thus their future settlement behavior could be a compelling suggestion of even longer term impacts of the social contact hypothesis (Burland and Lundquist 2013). To get at the pre-service neighborhood effect we will interact veteran status with the percentage of same race exposures as a child. While we do not have a measurement for parents’ veteran status, this will at least allow us to see how much our main effect is driven by pre-service experiences. Finally, our future analyses will also assess the extent to which greater diversity in white veteran neighborhoods is driven only by specific racial group exposures or many racial groups. Understanding veterans’ racial resettlement patterns is important for a number of reasons. In a society where racial residential segregation remains largely intractable for some marginalized groups, it is important to ask where we can find an exception to the rule and then ask why. In this paper we have addressed the first part of that question, showing that white US veterans do not behave similarly to the average white civilian. This is a positive trend that has gone largely unnoticed until now. The possible long-term desegregation effect of military service should be examined more closely to understand its
cause(s) and to potentially to draw lessons for larger society on what conditions might lead to similar trends among civilian society. Given the Pentagon’s recent budget cuts and planned personnel reductions, the military may soon be reduced to its lowest number since the 1940s (The Week 2012). While many applaud this downsizing along with an end to long running global conflicts, now is the time to gather data on resettlement patterns to better understand whether desegregation can be attributed to the military as one of its more positive long lasting legacies.
References


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