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ATTITUDES TOWARD INTERRACIAL MARRIAGE

IN THE UNITED STATES MILITARY: BLACK-WHITE CONTRASTS

by

LEANNA GREENWOOD

Under the Direction of Mathew Gayman, PhD

ABSTRACT

In the midst of increasing multiracial identification and diversity in the United States, I examine whether White and Black military veterans hold different attitudes toward interracial marriage than those held by their coethnics in the general population. Using the General Social Survey, I examine the likelihood of military members opposing marriage between a close relative and a partner of a race different from the respondent's own, and whether their views are significantly different from their non-military coethnic counterparts. I use binary logistic regressions to assess whether opposition toward interracial marriage varies by military status and race. Results indicate that Whites are more opposed to interracial marriage than Blacks, and Whites with military service are more likely to oppose than their non-military counterparts. However, there was no difference among Blacks. In addition, age mediates the relationship between veteran status and attitudes among Whites, with younger people showing less opposition.

INDEX WORDS: Marriage, Attitudes, Veteran, Race, Military, Interracial

ATTITUDES TOWARD INTERRACIAL MARRIAGE IN THE UNITED STATES MILITARY: BLACK-WHITE CONTRASTS

by

LEANNA GREENWOOD

A Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of

Master of Arts

in the College of Arts and Sciences

Georgia State University

2017

ATTITUDES TOWARD INTERRACIAL MARRIAGE IN THE UNITED STATES MILITARY: BLACK-WHITE CONTRASTS

by

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May 2017

ACKNOWLEDGEMENTS

I would like to thank Jimmy and Ritter for their unending support of me: wherever would I be without you? Ashley, thank you for always having snacks and pictures of puppies. Also thank you to Dr. Mathew Gayman, without whose help this project would have never gotten done.

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1 INTRODUCTION

The demographic landscape of the United States is becoming more racially-ethnically diverse (Frey 2012). By 2060 the United States population is projected to be 49.4 percent White, 25.5 percent Hispanic, 13.3 percent Black, 5.2 percent Asian and Hawaiian native, with people of two or more races more than doubling in size from current figures to 5.8 percent (Frey 2012). Along with such demographic changes, the prevalence of interracial marriage has also increased. Accordingly, in 2010, 8.4 percent of marriages were interracial, compared to just 3.2 percent in 1980 (Frey 2014). Additionally, the rate of interracial marriages varies by race/ethnicity, where 16 percent of new marriages involving Whites from 2008 to 2010 were interracial and 27 percent of marriages involving Blacks were interracial (Frey 2014). Only 9 percent of interracial marriages in 2010 were between a Black and White partner, which is a striking contrast to 44 percent of interracial marriages being between a Hispanic and White partner (Frey 2014).

The increasing ethnic diversity and prevalence of interracial marriage in the United States has been accompanied by more favorable attitudes regarding interracial marriage among younger people (Heaton and Jacobson 2000). This is reflected in recent research indicating that 60 percent of millennials (those who came of age during the 2000s) accept interracial marriage as "a change for the better," compared to only 36 percent of baby boomers (those born between 1946 and 1964) (Frey 2014), underscoring a potential cohort effect.

Although Black millennials surveyed by Pew Research in 2010 were almost equally likely to support interracial marriage as White millennials, 2015 data show that Blacks were one of the least acceptable hypothetical interracial marriage partners among millennials in general (Pew Research 2010a). Regardless of the race of the respondent, millennials were least accepting of a marriage with a Black person (88% accepting), but still highly accepting of

interracial marriages with people of varying races: Hispanic (91%), White (92%), or Asian (93%) (Pew Research 2010a). Together the evidence indicates that Americans are generally more accepting of interracial marriage now than they used to be (Pew Research Center 2010a), and that Blacks are generally as accepting of interracial marriage as Whites (Pew Research Center 2010b) but least likely to be seen by non-Blacks as acceptable interracial marriage partners (Pew Research Center 2010a).

Despite growing evidence demonstrating increasing acceptance of interracial marriage in the general population and race differences in the rates of acceptance of interracial marriage, it is unclear whether these patterns are consistent among people who have served or currently serve in the United States military. As of yet, researchers do not know whether the acceptance of interracial marriage among military members compared to civilians varies by race. Additionally, whether other factors—such as age or neighborhood contact with people of different races—mediate the relationship between military status and attitudes remains unknown.

The study of interracial marriage attitudes in the military is important because military members interact with others in two ways that are different from civilian interactions. First, military members may be more likely to work cooperatively with people of other races than civilians (Lawrence and Kane 1996), which is important in the current context, given that the military is also an environment that is conducive to marriage formation through housing and income incentives for married couples (Teachman 2007; Jacobson and Heaton 2003; Lundquist and Xu 2014; Heaton and Jacobson 2000). In addition, modern military service often entails deployment overseas for long periods of time (Lundquist and Xu 2014), and exposure to different people and cultures is recognized as a contributing factor for more favorable attitudes toward interracial marriage in general (Jacobson and Heaton 2003).

Although there are reasons to believe that attitudes toward interracial marriage and race variations in attitudes may differ between military and civilian populations, published research on the topic is limited. In addition, studies that have been conducted on the topic do not address the attitudes of Black veterans (Lawrence and Kane 1995), nor do they gauge the attitudes of younger veterans (Jacobson and Heaton 2003). This study fills both gaps by gauging the attitudes of White and Black veterans in the three most recent administrations of a nationally representative survey.

Using data from the General Social Survey (GSS, in 2010, 2012, and 2014), I assess whether attitudes toward interracial marriage vary by military status and whether this relationship varies by race. In addition, I examine two possible mediating factors in attitudes toward interracial marriage: I test whether age (as a proxy for cohort differences) or neighborhood racial segregation (as a proxy for interracial contact) mediates the relationship between military status and attitudes toward interracial marriage.

2 LITERATURE REVIEW

2.1 Prevalence of Interracial Marriage

In 2010, about 8.4 percent of all marriages were interracial (Frey 2014). Though rates of interracial marriage may still be low (Jacobson and Heaton 2003; Lee and Bean 2010), in the general population, interracial marriages have been on the rise in the last 50 years (Frey 2014; Herman and Campbell 2012). There is good evidence to suggest that this upward trend will continue into the future, even between groups for which social barriers against interracial marriages have historically been highest (Frey 2014).

Interracial marriage serves as a link between social groups (Kalmijn 1998) and is the most-studied type of interracial relationship (Herman and Campbell 2012). It is important to the

study of race relations because it is an indicator of assimilation or incorporation (Jacobson and Heaton 2003; Frey 2014; Lee and Bean 2010), and a gauge of race relations in the United States (Perry 2013). Researchers often consider interracial marriage to be the highest level of intimacy in measures of social distance (Herman and Campbell 2012).

In the United States today, some racial-ethnic minority groups experience proportionally lower levels of interracial marriage compared to Whites. For example, Black-White marriages are less prevalent than Asian-White and Hispanic-White marriages, although the percentage of Black-White marriages is increasing (Frey 2014). Thus, even though Blacks may be more accepting of interracial marriage than Hispanics (Frey 2010b), Blacks marry interracially at lower rates.

2.2 Attitudes Toward Interracial Marriage

Attitudes toward interracial marriage have long served as measures of social distance between groups (Perry 2012; Kalmijn 1998). In the United States, people have generally become more accepting of interracial marriage over the past fifty years, with birth cohorts showing steady increases in acceptance with the passage of time (Frey 2014; Heaton and Jacobson 2000; Pew Research Center 2010a). Attitudes are good predictors of intentions to actually perform the behavior in question when individuals are able to do so (Ajzen 1992). Therefore, understanding attitudes toward interracial marriage can help predict actual marriage behaviors, which is important to understanding changing patterns in family formation given increasing diversity of the U.S. population.

Since the Supreme Court ruling in *Loving v. Virginia* in 1967, support for laws banning interracial marriage has declined (Herman and Campbell 2012). However, researchers should take caution when assuming that attitudes are uniformly becoming more supportive, because

there is a difference between attitudes toward others' behaviors (global attitudes) and attitudes regarding one's own behavior (personal attitudes) (Herman and Campbell 2012). For instance, Lee and Bean (2010) argue that though structural factors (such as places where contact with people of different groups is possible) affect opportunities to meet potential partners, cultural attitudes affect willingness to engage with people of other racial groups on an intimate level (Lee and Bean 2010).

The presence of racially diverse potential partners influences opportunities to meet and marry interracially (Herman and Campbell 2012). Where barriers (such as differences in race, class, or education) are low, there is also likely to be less resistance to interracial marriage (Jacobson and Heaton 2003). Changes in attitude due to interaction can be best explained using the contact hypothesis. First articulated in the 1940s and 1950s, the hypothesis states that contact between people of different groups reduces prejudice when the interaction meets certain criteria (Allport 1957). Those criteria are: a cooperative and supportive environment for the achievement of common goals; equality of status between groups (Lawrence and Kane 1995); and interactions that are sanctioned by authorities (Butler and Wilson 1978). Others have argued that, in addition to these conditions, the relationships should be intimate in nature and involve more than one person from the "other" group (Perry 2013).

This project cannot directly test interracial contact in the military because the GSS does not specifically ask when and under what conditions contact with people of a race different from the respondent's own occurs. As an alternative, this study examines whether the presence of people of a different race in respondents' neighborhoods mediates the relationship between military status (vs civilian) and attitudes toward interracial marriage. Research showing that, for Whites, the presence of racial minorities living in respondents' neighborhoods predicted more

favorable attitudes toward interracial marriage with people of the minority groups (Perry 2013) supports the use of this proxy.

2.2.1 Race Differences in Attitudes Toward Interracial Marriage

There are some studies in the literature that examine attitudes toward interracial marriage by race, though the attitudes of Blacks are much less researched than the attitudes of Whites.

This makes it difficult to predict Blacks' attitudes in the current research. Perry (2013) found that the presence of Black people in neighborhoods, church settings, and workplaces helped predict Whites' more accepting attitudes toward a hypothetical marriage between someone of those groups and themselves. Perry's (2013) analysis found that Whites' attitudes toward interracial marriage with Black people was mediated by whether or not Whites had developed friendships with people of those racial-ethnic groups, indicating that Whites' interracial marriage attitudes can be tempered by the intimacy of contact with non-White groups. Similarly, Jacobson and Johnson (2006) found that the amount of contact and friendship with Whites was a crucial factor to account for in predicting Blacks' attitudes toward interracial marriage with Whites.

Lee and Bean (2010) argue that cultural factors can also help explain differences in attitudes toward interracial marriage by race. For instance, acceptance of interracial marriage has fluctuated among both White ethnic and Black populations in the United States due to cultural attitudes about maintaining the sanctity of the group, to the extent that members who marry outside the group have been considered "traitors" (Lee and Bean 2010).

2.2.2 Attitudes Toward Interracial Marriage in Military

While researchers know little about racial variation in attitudes regarding interracial marriage in the general population, they know even less about race variations in the role of military service for attitudes regarding interracial marriage. Only one study (Lawrence and Kane

1995) specifically deals with the interracial marriage attitudes of veterans, but that analysis is limited to the attitudes of White veterans. Additionally, most of the literature cited here does not deal specifically with veterans' attitudes toward interracial marriage, but deals rather with veterans' general racial attitudes. Here, I draw upon the available literature on the social characteristics of military members, the policies and structure of the military, and what is known about general racial attitudes among veterans to understand how the military setting is different from the general population and why military service could contribute to more accepting attitudes toward interracial marriage.

2.3 The Military's Unique Social Characteristics

The military is an interesting site to explore the role of race contact in interracial marriage attitudes. This is because its unique institutional characteristics satisfy all of the criteria set forth by the contact hypothesis. In the military, people of different racial backgrounds live and work together in cooperative units (Jacobson and Heaton 2003). In addition, military units are comprised of soldiers with similar status and who are subject to the authority of higher-ranking members (Lawrence and Kane 1995).

Though the military has a highly regimented rank structure, social status within the military is described as egalitarian because similarly ranked members must work together on tasks and treat each other with relative informality and equality (Lawrence and Kane 1996). Compared to the civilian population, military members experience less segregation in relation to a range of social characteristics, such as age (Kelty et al 2010), education (Jacobson and Heaton 2003), and socioeconomic status (Lawrence and Kane 1996). For example, race and gender disparities in educational attainment are smaller within military populations than in the general population (Jacobson and Heaton 2003).

The military is also a racially and ethnically diverse workplace, which could create an environment that contributes to positive racial interactions by meeting the stipulations of contact hypothesis. There is evidence of less racial segregation within military populations than in civilian life: according to a 2013 demographics report surveying active duty members of all branches of the military, approximately 17 percent of the armed forces were Black, and 69 percent White (Office of the Deputy Assistant Secretary of Defense). The military employs and retains minority members because it is perceived as less discriminatory than civilian workplaces (Burke and Espinoza 2012). For example, Burke and Espinoza (2012) note that the military employs a higher percentage of Black women than would be expected based on their proportion in the population because Black women tend to enter into and hold nontraditional jobs that are available to them through military service but not in civilian life.

So far, it has proven difficult for researchers to isolate the unique effect of military service upon racial attitudes. Lawrence and Kane (1995) cite studies of White veterans of World War II and the Korean War who held more favorable views of Blacks after serving in integrated units than those who did not serve with Blacks. In addition, these authors mention that two other factors could contribute to changes in racial attitudes among the military population: (1) pre-existing feelings of friendship between Whites and Blacks before military service and (2) situation-specific circumstances of service (Lawrence and Kane 1995). Some scholars have found that service in the military positively affects general racial attitudes when age and education are controlled for (Jacobson and Heaton 2003). For instance, Jacobson and Heaton (2003) show that socioeconomic status and education levels within military ranks are often similar, which is a prerequisite for improvement of racial attitudes under contact hypothesis. Lawrence and Kane (1995) note that in studies of veterans after World War II, White veterans

reported that service in the lower echelons of the military resulted in more positive attitudes toward Blacks. Butler and Wilson (1978) find that positive pre-service interactions between Blacks and Whites had a positive effect on racial attitudes, while more contact between races during service reduced racial separatist attitudes. This evidence supports the hypothesis that service in the military contributes to more positive attitudes toward members of other racial groups. However, positive attitudes toward people of other races do not necessarily translate into openness to marrying them (Herman and Campbell 2012).

Given the above discussion of younger people holding more positive attitudes toward interracial marriage and changing patterns of military recruitment in modern U.S. history, I suspect that age is related to both veteran status and opposition to interracial marriage. By including age as a mediator, rather than control variable, I will be able to see what the unique impact of veteran status is upon attitudes toward interracial marriage when the impact of age upon attitudes is also taken into account.

In order to understand why there are racial differences in the military's effect upon attitudes toward interracial marriage, I turn now to an examination of the institutional traits of the military that may contribute to members' differential racial treatment.

2.4 Military Structure and Policies

There is reason to believe that the military may foster more positive racial attitudes than civilian life because of its unique structure and policies regarding racial treatment. This section will discuss our current knowledge on how the military's structuring of daily life, treatment of soldiers by race, enforcement of affirmative action, and recruitment strategies give evidence that service in the military may contribute to more positive racial attitudes.

2.4.1 Structure

One organizational feature of the U.S. military that may foster improved race relations is that it is a total institution. Put forth by Erving Goffman in 1957, total institutions are settings that encompass the whole individual and prevent interaction with the outside world. For the current study, it is important to note that total institutions break down the barriers between participants' sleep, work, and play—that is, all life activities are compulsory, occur in the same location, and are sanctioned by a single authority (Goffman 1957). According to Goffman (1957), total institutions are unique because daily activities are carried out side-by-side with others who all receive the same treatment from authorities. Goffman (1957) makes specific mention of army barracks as an example of a total institution. The structure of the military tends to minimize racial and economic stratification (Lundquist 2004). The military differs from the civilian population in that single military members live in racially integrated spaces and work together in less discriminatory environments (Lundquist 2004).

As Goffman (1957) states, "inmates" in total institutions experience shifts in their moral careers as a result of their "captivity." This is relevant to the current study because there is evidence that military members take on certain attitudes about marriage and race as a result of living within the military system of values. For instance, researchers note that since the All-Volunteer Force began, the military imposes heteronormative family values upon its members, encouraging them to marry through a system of supportive services (Lundquist 2004; Lundquist and Xu 2014). Lawrence and Kane (1995) cite evidence from soldiers who served in integrated units during World War II and reported more favorable attitudes toward Blacks than did their peers who did not serve with Blacks. Jacobson and Heaton (2003) find that the military services create a group spirit among all racial and ethnic groups that makes members feel unified. If the

military does impart values of marriage and race upon its members, then service in the military could be important to understanding changes in attitudes toward interracial marriage in the population.

Based on the current available research, evidence suggests that military service contributes to racial attitudes, though for some groups the effect of military service may be partly negative. This is particularly interesting given that the U.S. Army was one of the first government institutions to integrate, with an Executive Order in 1948 (Butler 1992). Lawrence and Kane (1995) acknowledge that the general trend of improving race relations in the military may be due more to enforced racial equality than favorable individual attitudes. Importantly, there is evidence that racial attitudes in the military do not occur in the same way for Blacks for Whites. Butler and Wilson (1978) find that, for younger Blacks, service in the military is associated with more separatist attitudes than their older Black counterparts espoused.

2.4.2 Policies

In terms of policy, there is competing evidence as to whether the military promotes racial equality and positive racial attitudes in its treatment of soldiers by race, in its enforcement of affirmative action, and in its recruitment strategies. There is evidence in the literature that the military has improved its race relations since the 1940s, but inequalities persist (Burk and Espinoza 2012; Armor 1996). Armor (1996) provides a review of the controversies surrounding race representation in the military, noting that military policy makers have historically responded to complaints about Blacks serving as "cannon fodder" in high-risk combat positions more often than Whites through changing enlistment and draft procedures. Burk and Espinoza (2012) provide an extensive review of the literature on military discrimination. They note that the military only became integrated in 1948 as a result of the need for more soldiers in the Korean

War (Burk and Espinoza 2012). They find that the military practices racial discrimination against racial minorities in three structural ways: promotion of officers, prosecution within the military justice system, and in treatment of military-related medical issues (especially as it relates to diagnosis and treatment of PTSD) (Burk and Espinoza 2012). Lutz (2008) notes that in racially integrated units, Black soldiers experience discrimination by the White officers who command them.

Race relations in the military have come under increased scrutiny since the early 1970s, especially following public outcry regarding the unequal number of Black casualties during the Vietnam War (Burk and Espinoza 2012; Butler and Wilson 1978; Armor 1996). As a result, in 1972, the Army enacted the Army Affirmative Action Plan, which made commanders responsible for—and their promotion dependent upon—racial impartiality and equal opportunity within their units (Lawrence and Kane 1995). Lawrence and Kane (1995) point to this legislation within the Army as a structural mandate to improve race relations. In 1973, the All-Volunteer Force era began and the military rewrote the moral contract governing its relationship with racial minorities (Burk and Espinoza 2012). Though no branch of the military espouses explicit recruitment objectives by race or ethnicity, recruitment and enlistment policies have the effect of attracting people of different races disproportionately, depending on the military's needs for combat roles. In the 1970s, the Defense Equal Opportunity Management Institute was created to address issues of racial discrimination in the military (Lutz 2008). Interestingly, the DEOMI promoted a policy of overarching American identity-rather that multiculturalism-to promote unity among soldiers (Lutz 2008). The effect of this policy, some argue, is that discriminatory speech and actions are only problematic when they negatively impact combat readiness (Lutz 2008).

Since the end of the Cold War, military service has entailed more long deployments overseas (Lundquist 2007; United States General Accounting Office 2000). As of 2013, there were about 177,000 American active duty military personnel overseas (Office of the Deputy Assistant Secretary of Defense). As women and Blacks tend to disapprove of these overseas engagements, the military has increased bonuses and lowered standards of enlistment in order to maintain a viable workforce (Burk and Espinoza 2012; United States General Accounting Office 2000). This is also important for the current research because, as the military has involvements in other countries, military members interact with diverse groups (Buttny 1987).

2.5 Attitudes Toward Interracial Marriage Among Military Members

Though research on attitudes toward interracial marriage among military members is limited, one study has attempted to approach the topic. In their 1995 study using GSS data collected between 1972 and 1991, Lawrence and Kane found that veterans were slightly more likely than civilians to oppose barriers to interracial marriage. This could be evidence that the military is conducive to more positive racial attitudes. Lawrence and Kane's 1995 research is foundational to the current study, as it is one of the only works that specifically studied military members, used a nationally representative survey, and asked specifically about racial attitudes (rather than behaviors). However, Lawrence and Kane's work (1995) is limited in three ways that this project seeks to expand upon: their analysis was conducted only among White men because there were too few Black and women veterans in the dataset; it is now over twenty years old; and it did not gauge the attitudes toward interracial marriage specifically.

3 HYPOTHESES

Based on the literature on interracial marriage attitudes among military members, I hypothesize that there are race differences in opposition toward interracial marriage, with Blacks

being less opposing than Whites. I also hypothesize that Blacks' and Whites' attitudes toward interracial marriage vary by military status, with veterans of both races holding less opposing attitudes than their civilian counterparts. Finally, I hypothesize that age and neighborhood racial makeup mediate the relationship between veteran (versus civilian) status and interracial marriage attitudes. Specifically, older people and those who live in racially segregated neighborhoods will be more opposed to interracial marriage, and that these differences will help explain the relationship between veteran (versus civilian) status and interracial marriage attitudes.

4 METHOD

4.1 Data

This project uses data from the General Social Survey (GSS) for the years 2010, 2012, and 2014. The GSS is a nationally representative, probability-based cross-section of the United States adult population. It captures behavioral, attitudinal, and demographic characteristics through personal interview surveys. Begun in 1972, the GSS has been conducted every year or every other year. Since 1994, the survey has been conducted every two even years. GSS data are publicly available at https://gssdataexplorer.norc.org.

I used this dataset because it allows for comparison between the general population and military veterans in recent years. Datasets that contain information about military service are often limited in the scope of social attitudes and behavior they capture. The GSS is one of the few nationally representative datasets that can answer my research questions, as it includes the military status question but also a plethora of social and attitudinal questions. Although questions about military service have been asked sporadically in the GSS since the 1970s, the three most recent survey years provide insight on the racial attitudes of younger military members. The fact that these three survey years are so recent allows me to include younger

military members whose interracial marriage attitudes have not yet been examined by other researchers. The data from 2010, 2012, and 2014 allow me to capture the responses of veterans who have served in the United States military during the country's most recent wars in the Middle East, including Iraq and Afghanistan. As such, this project provides a contemporary response to the now decades-old work of Lawrence and Kane (1995) and an update to Jacobson and Heaton (2003).

The GSS had 5,915 Black and White respondents for the three survey years (n=1,861 in 2010; n=1,778 in 2012; and n=2,276 in 2014). I pooled the data in order to increase statistical power (i.e., the ability to detect the effect of military service for the smaller racial group, Blacks). Of the total sample, 11.8% are military veterans (n=699). This suggests the GSS slightly under-samples military members and veterans, as the current percentage of Americans in the military is about 14% according to Census Bureau (2012) estimates.

The analytic sample is limited to individuals who provided information about military service and their attitude toward interracial marriage with either a White or Black hypothetical partner. Because the GSS is designed to include as many variable modules as possible in any given year, the interracial marriage attitude questions were only asked of a sub-sample of respondents. This accounts for the "inapplicable" data for each question: 1,912 respondents were not asked about marriage with a White person; and 1,912 respondents were not asked about marriage with a Black person. Those few who answered "some/don't know" (n =2) on the military service question are included as veterans, while the 4 respondents who had missing data on the military service question are dropped from the analysis. Of those who had valid information on military service, 100% of respondents provided a valid response to the interracial

marriage question(s). The sample is further limited by missing data on the control variables, discussed below. The total sample size I used in analysis is 3,669.

4.1.1 Missing Data

A methodological issue that arose during this research is that of missing data on the independent variables, which I addressed through listwise deletion. That is, if a respondent had an existing response to the veteran service question but had missing information on any of the independent variables, I dropped them from the analytic sample. For the political views variable, there were relatively large amounts of missing data: 3.7% missing (n=216 missing responses). Using listwise deletion does not bias my sample because respondents were randomly assigned to get these questions. Drawing from Allison (2001), listwise deletion results in unbiased estimates in this case because the missingness is due to a random sub-sample of the GSS, otherwise known as missing completely at random (MCAR).

4.1.2 Sample Restrictions

Because the GSS samples only adults living in households, it does not reach people living in institutional quarters. For people within the age group from 18-24, almost 10% of the population lives outside of households, mostly in college dormitories or military quarters. This means that the GSS does not interview people who currently serve in the military and live on military property. Similarly, the GSS does not survey people who are living overseas as a result of military deployment. As such, I can only use my analyses to draw conclusions about the attitudes of veterans who are no longer serving with the military and those who may currently be serving but who live in private households.

4.2 Measurement

4.2.1 Attitudes toward interracial marriage

My dependent variable is interracial marital attitudes. The GSS measures attitudes toward a close relative marrying people of various races with the question: "What about having a close relative marry a [Black/White] person?" Response categories include: "(1) Would you be in favor of it happening, (2) somewhat in favor, (3) neither in favor nor opposed to it happening, (4) somewhat opposed, or (5) very opposed to it happening?" I combine the GSS questions for attitudes about marrying a White and Black person into one variable to capture attitudes toward marrying someone of a *different* race. Black respondents who answered about attitudes toward marrying a White person and White respondents who answered about attitudes toward marrying a Black person combine to form the new variable. The response categories are condensed so that strongly opposed and somewhat opposed are combined, as are strongly favor, somewhat favor, and neither favor nor oppose. A value of 1 indicates the respondent opposes interracial marriage with someone of a race different from their own. For Whites, 1 represents opposing marriage with Blacks, and for Blacks a value of 1 represents opposing marriage with Whites.

I condensed categories for two reasons. For one, crosstabulations revealed that some cells had such low counts that it would be difficult to produce and interpret regression estimates. Second, the condensed categories allowed me to discriminate estimates between opposition and the lack of opposition in respondents' attitudes. I am interested in opposition specifically because I suspect that respondents might be less willing to outright "oppose" interracial marriage given social desirability bias (Singleton and Straits 2010). That is, because the GSS is conducted through face-to-face interactions between interviewer and respondent, respondents may be unwilling to express opposing attitudes, especially if holding the opposing attitude is socially

unacceptable. It is likely that many respondents answered "neither favor nor oppose" in order to avoid expressing outright opposition, rather than to express true neutrality on the issue. For these reasons, I think the line between "favor" and "neutral" best marks the boundary between people who have outright oppositional attitudes.

It is important to note that the marriage questions assess global attitudes, which are different from actual behavior patterns (Herman and Campbell 2012). Global attitudes are what one believes others' behavior should be (Herman and Campbell 2012). As has been previously mentioned, attitudes do not necessarily equate to intent to marry (Herman and Campbell 2012). The GSS measures global attitudes toward someone else—a close relative—marrying a partner of a specified race/ethnicity. These questions do not inform us of whether the "close relative" in the respondents' minds are necessarily of the same race as the respondent themselves, which is important to keep in mind given the increasing multiraciality of the United States. The questions are also worded such that respondents are presumed not to be multiracial. GSS global attitude questions get at the principle of decreased social distance, but do not allow comparison between professed attitudes and actual behavior (Herman and Campbell 2012).

Though asking about global attitudes and opposition toward someone else marrying someone of another race can be seen as limitations, for this study, they are strategic benefits. Because about 73 percent of respondents are already married or have been married in each survey year, if questions were to be asked about respondents' intended future marriage partners, they might be unanswerable. Because of this, asking about global attitudes is the best possible substitute for asking about respondents' own views about interracial marriage.

4.2.2 Military service

I used military service to predict outcomes on attitudes toward interracial marriage. I represented military service with a dichotomous variable derived from the question: "Have you ever been on active duty for military training or service for two consecutive months or more?" I assigned a value of 1 to all respondents who answered that they had served in the military for any amount of time. The reference category (0) is for those respondents who have not served in the military.

4.2.3 Mediators

I included <u>age</u> as a potential mediator between attitudes toward interracial marriage and military history. I measured age in years and split it into three dummy variables: younger than 35 years old (reference), 35 to 60 years old, and over 60 years old. Though I used age as a mediator for this project, it actually is not a mediator in the conventional sense. I expected that age would be related to both attitudes and veteran status, but veteran status cannot be said to impact age as in a conventional mediation model. Rather, I use age here to isolate the impact that age has upon attitudes.

I included <u>neighborhood racial makeup</u> as a second potential mediating variable. The GSS asks respondents "Are there are any ('Whites' for Black respondents; 'Blacks' for White respondents) living in this neighborhood now?" I then recoded this variable so that respondents who do not live with people of the different race are assigned a value of 1 and those who do live in mixed neighborhoods constitute the reference category.

4.2.4 Controls

I included the following control variables. <u>Sex</u> is a dummy variable where 1=male. Education is a continuous variable measured in years. I assessed political ideology as seven

categories ranging from extremely liberal to extremely conservative, where higher values indicate more conservative. I measured geographic region using a set of 9 dummy indicators: South, New England, Mid Atlantic, East North Central, West North Central, East South Central, West South Central, Pacific, and Mountain (reference). I chose Mountain as the reference because it was least oppositional in supplemental analyses. I indicated marital status with a group of dummy variables for divorced, separated, never married, and widowed, where the reference group is married.

4.3 Analytic Strategy

I conducted analysis of the data using SPSS 23. I first examined descriptive statistics for interracial marriage attitudes by race and veteran status. I examined differences by veteran status with chi-squared tests of independence. I conducted multivariate analyses with controls and suspected suppressors and mediators using binary logistic regression. This type of regression procedure is appropriate because initial ordinal logistic regression analyses with the five-category Likert-type scale dependent variable violated the proportional odds assumption in the test of parallel lines and SPSS recommended a less restrictive model fitting strategy. Thus, I used binary logistic regression instead, with the aforementioned recoding of the dependent variable.

Table 5.1 presents the descriptive statistics for the analytic sample. Table 5.1 examines each variable used in the subsequent regression analyses by race and veteran status. Table 5.1 displays the results of chi-squared and ANOVA analyses here, which allow me to see where there are veteran and race differences in values of the independent, dependent, mediating, and control variables. These statistics are useful in addressing whether, among Whites, attitudes

toward interracial marriage vary by veteran status and whether, among Blacks, attitudes toward interracial marriage vary by military status.

Chi-squared is a statistic that describes whether the values of one categorical variable are associated with values of another. In this case, it helps distinguish whether or not membership in a veteran-race group helps predict values of the included variables. The significant chi-squared statistics show which contrasts (between White civilians and veterans; between Black civilians and veterans; across White civilians and Black civilians; and across White veterans and Black veterans) are unlikely to be due to random chance.

Table 5.1 also includes ANOVA statistics for the interval-level variables. ANOVA, or analysis of variance, compares means for interval/continuous variables. The significance of each statistic shows the likelihood that a value as extreme is due to random chance. Each veteran-race group (White civilians; White veterans; Black civilians; Black veterans) has a mean value for education and political views.

Table 5.3 shows the results of binary logistic regressions for Whites. Model 1 shows the bivariate relationship between veteran status and attitudes toward interracial marriage. Model 2 adds in all the control variables. Model 3 adds age, the first possible mediating variable. Model 4 steps out age and steps in the second possible mediator, neighborhood racial makeup. The results displayed in Table 5.3 answer whether age or neighborhood racial makeup meditate the relationship between veteran status and interracial marriage attitudes. Veteran status is unrelated to marriage attitudes for Blacks in the crosstabulations, making further regression analyses obsolete. I discuss this matter in more depth below.

5 RESULTS

5.1 Bivariate Results

Shown in Table 5.1, 17 percent of the total sample opposes interracial marriage. Both White civilians (18%) and White veterans (29%) exhibit higher than average rates of opposition, while Black civilians (6%) and Black veterans (5%) exhibit lower rates of opposition. Twelve percent of the sample are veterans, while 13 percent of Whites are veterans and 11 percent of Blacks are veterans. I used chi-squared analysis to determine if these differences within and across the veteran-race groups are statistically significant.

I found that there are statistically significant race differences in opposition to interracial marriage, which is evidenced by the "Acrosscivilians" and Acrossvets" chi-squared columns. Across civilians and vets, I compared Whites and Blacks to each other. White and Black civilians have a chi-squared value of 53.46, significant at the p <.001 level. Specifically, 18 percent of White civilians and 6 percent of Black civilians opposed. White and Black veterans also hold different attitudes, with a chi-squared value of 17.48, significant at the p <.001 level. Specifically, 29 percent of White veterans and 5 percent of Black veterans opposed. I also found that attitudes toward interracial marriage vary by military status for Whites. White veterans (29% oppose) and civilians (18% oppose) have different rates of opposition, with a chi-squared statistic of 27.72, significant at the p<.001 level. Within Blacks, however, veterans and civilians do not hold statistically significantly different attitudes: the chi-squared value is near zero at .27.

Table 5.1 Descriptive Statistics

	Total	Wh	iites	Blac	ks		Chi-Squar	ed/ANOVA	
	N=3669	(N=:	3019)	(N=6	50)				
Variables	% (N)	Civilian N=2624	Veteran N=395	Civilian N=586	Veteran N=64	Withinwhite	Within Black	Across _{Civilians}	Across _{Veterans}
		% (SD)	% (SD)	% (SD)	% (SD)				
Oppose Interracial Marriage	17 (652)	18 (.38)	29 (.45)	6 (.24)	5 (.21)	27.72***	.27	53.46***	17.48***
Veteran ^a	12 (472)								
Male ^b	44 (1684)	39 (.49)	91 (.28)	29 (.45)	80 (.41)	550.89***	98.37***	18.10***	3.27
Married	44 (1684)	47 (.50)	54 (.50)	22 (.42)	33 (.47)	10.32**	2.88	177.56***	17.38***
Widowed	9 (351)	9 (.29)	10(.30)	8 (.27)	9 (.30)	.36	.376	1.182	0.00
Divorced	17 (639)	16 (.36)	24 (.43)	17 (.38)	27 (.45)	28.771***	5.23*	1.60	0.30
Never Married	27 (1011)	24 (.43)	9 (.28)	47 (.50)	27 (.45)	14.93***	14.93***	91.69***	24.69***
Separated	3 (114)	3 (.17)	2 (.14)	4 (.19)	5 (.21)	1.82	.49	2.12	3.92*
South	22 (827)	18 (.39)	22 (.41)	36 (.48)	31 (.47)	7.96**	1.20	107.31***	1.13
New England	5 (179)	6 (.23)	6 (.23)	1 (.12)	2 (.13)	.02	.29	28.32***	2.11
Mid Atlantic	11 (404)	12 (.32)	9 (.29)	13 (.34)	5 (.21)	3.18	3.54	2.18	.70
East North Central	19 (697)	19 (.40)	16 (.36)	13 (.34)	11 (.31)	4.94*	1.57	19.85***	3.21
West North Central	6 (220)	7 (.25)	7 (.26)	3 (.17)	13 (.33)	.74	13.51***	15.61***	1.23
East South Central	6 (220)	6 (.23)	6 (.24)	10 (.31)	6 (.24)	.36	.00	29.96***	2.53
West South Central	10 (370)	10 (.29)	9 (.28)	13 (.34)	17 (.38)	.39	.98	12.63***	6.48*
Mountain	8 (294)	8 (.28)	10 (.31)	3 (.16)	3 (.18)	3.17	.07	33.23***	4.85*
Pacific	13 (477)	14 (.35)	13 (.33)	8 (.26)	13 (.33)	1.21	2.15	30.74***	.06
Neighborhood Racially Homogenous ^c	27 (1001)	31 (.46)	29 (.45)	11 (.31)	6 (.24)	.55	4.54*	138.99***	26.20***
18 to 34 years old	27 (988)	28 (.45)	10 (.30)	36 (.48)	14 (.35)	70.14***	11.66**	20.83***	2.56
35 to 60 years old	46 (1667)	47 (.50)	35 (.48)	47 (.50)	48 (.50)	29.05***	.35	.14	2.89
Over 61 years old	28 (1013)	26 (.44)	54 (.50)	17 (.37)	38 (.49)	191.66***	22.63***	26.99***	7.19**
	Sample Mean (SD))				Overall F-statistic	;		
Education	13.67 (2.98)	13.79 (3.04) ^{BC***}	13.75 (2.71) ^{BC***}	13.04 (2.81) WC; WV***	13.77 (2.59)	16.23***			
Political ideology (5=conservative)	4.10 (1.45)	4.11 (1.44) BC, WV***	1.46 (1.44) WC, BC***; BV*	* 3.80 (1.41) WC, WV***	3.92 (1.38) WV**	25.40***			

^{***}p<.001; **p<.01; *p<.05

Note: values shown are % (N) or Mean (SD)

Note: supercript initials indicate statistically significant mean differences between groups

Note: WV=White veterans; BV=black veterans; WC=white civilians; BC=black veterans

Note: ^a reference is civilian; ^b reference is female; ^c reference is racially mixed neighborhood

In summary, in support of my first hypothesis, there are race differences in acceptance of interracial marriage between Blacks and Whites, with Blacks being less opposing than Whites. There are also differences by veteran status for Whites, with White veterans being the most opposing group. Black civilians are not statistically significantly different from their veteran counterparts in terms of their values on the interracial marriage attitude question.

5.2 Mediation Results

Not finding any difference in opposition to interracial marriage by veteran status for Blacks, I ran regressions only for Whites. I ran the regressions to determine whether age or neighborhood racial makeup mediates the relationship between veteran status and attitudes. Model 1 shows odds ratios representing the bivariate relationship between veteran status and opposition to interracial marriage. The odds ratio for veteran status is 1.86, significant at the p<.001 level. This indicates that White veterans are almost twice as likely as White civilians to oppose interracial marriage when no other variables are controlled for.

Model 2 adds all the relevant control variables. The odds ratio for veteran status is reduced to 1.42 but is still significant at the p<.05 level. When controlling for all the background sociodemographic variables, veterans are still about 40 percent more likely to oppose interracial marriage than civilians.

Model 3 investigates age as a possible mediating factor between military status and attitudes toward interracial marriage. It includes the two age dummy indicators (with the youngest group as the reference), the control variables, and age. This model shows evidence of mediation because the odds ratio for veteran status is reduced to nearly 1; it becomes statistically non-significant, and the odds ratio for the age dummies remains significant. Comparing the logistic regression coefficients (not shown) for military status in Models 2 and 3, controlling for

age reduces the coefficient for veteran status by 86 percent (1 - [.052/.359] = .86). These results indicate that the difference in attitudes toward interracial marriage for Whites is almost completely explained away by age. I ran subsequent analyses (not shown) separately among the three distinct age groups for Whites. For only the oldest group, people above 61 years of age, was veteran status related to attitudes. This is an interesting finding that could be further evidence that age—or perhaps era of military service or cohort—is what really drove the differences I found in attitudes between White veterans and civilians.

Model 4 tests neighborhood racial makeup as the second possible mediator of the relationship between veteran status and opposition to interracial marriage. After controlling for neighborhood racial makeup, the odds ratio for veteran status in this model is 1.47, significant at the p<.01 level. This model does not show evidence of neighborhood racial makeup mediating the relationship between veteran status and opposition.

5.3 Summary of Findings

Overall, the relationship between veteran status and opposing interracial marriage is independent of the controlled for sociodemographic characteristics, with the exception of age. White veterans are almost twice as likely as civilians to oppose interracial marriage in the bivariate model. Stepping in age reduced the odds ratio for veteran status to 1.05, which was not statistically significant. This indicates that opposition to interracial marriage may be a function of age. White veterans tend to be older than civilians (59.56 years versus 48.68 years). Additional analyses show that older people are also more likely to oppose interracial marriage (7.6% of people age 18-34 oppose; 14.6% of people 35-60 oppose; and 30.6% of people older than 60 oppose).

Table 5.3 Regression of Attitudes upon Sociodemographic Variables (OR)

Veteran 1.86*** 1.42* 1.05 1.47** Education .879*** .88*** .88*** (.02) (.02) (.02) (.02) Male* 1.29* 1.37** 1.23 (.11) (.11) (.11) (.11) Political Views 1.28*** 1.27*** 1.28*** (.04) (.04) (.04) (.04) Regionb 2.59*** 2.52*** 2.61*** (.22) (.23) (.23) (.23) New England 1.31 1.25 1.25 (.22) (.23) (.23) (.23) (.23) Mid Atlantic 2.03** 2.03** 2.03** 2.03** (.25) (.25) (.25) (.25) (.25) East North Central 1.69 1.72 1.69 (.28) (.28) (.28) (.28) East South Central 3.67*** 3.80*** 3.62*** West South Central (.25) (.25)	Variables	Model 1	Model 2	Model 3	Model 4
Education 8.79*** 8.8*** 8.8*** (.02) (.02) (.02) (.02) Male* 1.29* 1.37** 1.23 (.11) (.11) (.11) (.11) Political Views 1.28*** (.04) (.04) (.04) Region* South 2.59*** 2.52*** 2.61*** (.22) (.23) (.23) New England 1.31 1.25 1.25 (.31) (.31) (.31) (.31) Mid Atlantic 2.03** 2.03** 2.03** (.25) (.25) (.25) (.25) East North Central 2.11*** 2.05** 2.13*** (.23) (.23) (.23) West North Central 1.69 1.72 1.69 (.28) (.28) (.28) (.28) East South Central 3.67*** 3.80*** 3.63*** (.27) (.27) (.27) West South Central 2.30*** 2.42*** 2.10** (.25) (.25) (.25) (.25) Pacific 1.01 .97 .96 (.25) (.25) (.26) (.26) Marital Status* Divorced 1.00 .95 1.03 (.13) (.13) (.13) Separated 3.34** 3.6* 3.5** (.39) (.40) (.39) Never Married .49*** 81 .54*** (.14) (.16) (.14) Widowed 2.00*** 1.15 2.00*** (.15) Aged 35-60 2.00*** (.17) 4.91*** (.18)	Veteran	1.86***	1.42*	1.05	1.47**
Male*		(.12)	(.14)	(.15)	(.14)
Male*	Education		.879***	.88***	.88***
Color Colo			(.02)	(.02)	(.02)
Political Views	Male ^a		1.29*	1.37**	1.23
Code Code Code Code Code			(.11)	(.11)	(.11)
Region South 2.59*** 2.52*** 2.61***	Political Views		1.28***	1.27***	1.28***
South 2.59*** 2.52*** 2.61*** (.22) (.23) (.23) New England 1.31 1.25 1.25 (.31) (.31) (.31) (.31) Mid Atlantic 2.03** 2.03** 2.03** (.25) (.25) (.25) (.25) East North Central 2.11*** 2.05** 2.13*** (.23) (.23) (.23) (.23) West North Central 1.69 1.72 1.69 (.28) (.28) (.28) (.28) East South Central 3.67**** 3.80*** 3.63*** (.27) (.27) (.27) (.27) West South Central 2.30*** 2.42*** 2.10** (.25) (.25) (.25) (.25) Pacific 1.01 .97 .96 (.25) (.26) (.26) Marital Status* 3.4** .36* .35** (.39) (.40) (.39) Nev			(.04)	(.04)	(.04)
New England 1.31 1.25 1.25 (.31) (.31) (.31) (.31) (.31) (.31) (.31) (.31) (.31) (.31) (.25) (.25) (.25) (.25) (.25) (.25) (.25) (.25) (.25) (.25) (.25) (.23) (.23) (.23) (.23) (.23) (.23) (.23) (.23) (.23) (.23) (.23) (.23) (.23) (.28) (.28) (.28) (.28) (.28) (.28) (.28) (.28) (.28) (.28) (.27) (.27) (.27) (.27) (.27) (.27) (.27) (.27) (.25) (.25) (.25) (.25) (.25) (.25) (.25) (.25) (.25) (.26) (Region ^b				
New England 1.31 1.25 1.25 (.31) (.31) (.31) (.31) Mid Atlantic 2.03** 2.03** 2.03** (.25) (.25) (.25) (.25) (.25) (.25) (.25) (.25) East North Central 1.69 1.72 1.69 (.28) (.28) (.28) (.28) East South Central 3.67*** 3.80*** 3.63*** (.27) (.27) (.27) (.27) West South Central 2.30*** 2.42*** 2.10** (.25) (.25) (.25) (.25) Pacific 1.01 .97 .96 (.25) (.26) (.26) Marital Status ^c 1.00 .95 1.03 (.13) (.13) (.13) (.13) Separated 3.4** .36* .35** (.39) (.40) (.39) Never Married 4.9*** .81 .54*** (.14) (.16) (.14) Widowed 2.00*** <td< td=""><td>South</td><td></td><td>2.59***</td><td>2.52***</td><td>2.61***</td></td<>	South		2.59***	2.52***	2.61***
Mid Atlantic 2.03** 2.03** 2.03** (.25) (.25) (.25) (.25) (.25) (.25) (.25) (.25) (.25) (.25) (.25) (.25) (.25) (.25) (.25) (.25) (.23) (.23) (.23) (.23) (.23) (.23) (.23) (.23) (.23) (.23) (.23) (.28) (.28) (.28) (.28) (.28) (.28) (.28) (.28) (.28) (.28) (.28) (.28) (.28) (.28) (.27) (.27) (.27) (.27) (.27) (.27) (.27) (.27) (.27) (.25) (.25) (.25) (.25) (.25) (.25) (.25) (.25) (.25) (.26) (.26) (.26) (.26) (.26) (.26) (.26) (.26) (.26) (.26) (.26) (.27) (.			(.22)	(.23)	(.23)
Mid Atlantic 2.03** 2.03** 2.03** (.25) (.25) (.25) East North Central 2.11*** 2.05** 2.13*** (.23) (.23) (.23) West North Central 1.69 1.72 1.69 (.28) (.28) (.28) East South Central 3.67*** 3.80*** 3.63*** (.27) (.27) (.27) (.27) West South Central 2.30*** 2.42*** 2.10** (.25) (.25) (.25) (.25) Pacific 1.01 .97 .96 (.25) (.26) (.26) Marital Status ^c 1.00 .95 1.03 Marital Status	New England		1.31	1.25	1.25
East North Central (.25) (.25) (.25) (.25) (.25) (.25) (.25) (.26) (.23) (.23) (.23) (.23) (.23) (.23) (.23) (.23) (.23) (.23) (.23) (.23) (.28) (.28) (.28) (.28) (.28) (.28) (.28) (.27) (.27) (.27) (.27) (.27) (.27) (.27) (.25) (.25) (.25) (.25) (.25) (.25) (.25) (.26) (.26) Marital Status ^c Divorced 1.00 (.25) (.26) (.26) Marital Status ^c Divorced 1.00 (.13) (.13) (.13) (.13) (.13) (.13) Separated (.14) (.16) (.14) (.16) (.14) Widowed 2.00*** (.15) Age ^d 35-60 2.00*** (.17) >61 4.91*** (.18)			(.31)	(.31)	(.31)
East North Central 2.11*** 2.05** 2.13*** (.23) (.23) (.23) (.23) West North Central 1.69 1.72 1.69 (.28) (.28) (.28) (.28) East South Central 3.67*** 3.80*** 3.63*** West South Central 2.30*** 2.42*** 2.10** (.25) (.25) (.25) (.25) Pacific 1.01 .97 .96 (.25) (.26) (.26) Marital Status ^c 1.00 .95 1.03 (.13) (.13) (.13) (.13) Separated 34** .36* .35** (.39) (.40) (.39) Never Married 49*** .81 .54*** (.14) (.16) (.14) Widowed 2.00*** 1.15 2.00*** Age ^d 2.00*** (.17) >61 4.91*** (.18)	Mid Atlantic		2.03**	2.03**	2.03**
West North Central (23) (23) (23) (23) (23) (23) (23) (23			(.25)	(.25)	(.25)
West North Central 1.69 1.72 1.69 (.28) (.28) (.28) (.28) (.28) (.28) (.28) (.28) (.28) (.28) (.28) (.28) (.28) (.28) (.28) (.27) (.27) (.27) (.27) (.27) (.27) (.25) (.25) (.25) (.25) (.25) (.25) (.25) (.25) (.26) (.26) (.26) Marital Statusc (.26) (.26) Marital Statusc (.13) (.13) (.13) Separated 3.4** .36* .35*** (.39) (.40) (.39) Never Married .49*** .81 .54*** (.14) (.16) (.14) Widowed 2.00*** 1.15 2.00*** (.15) (.16) (.15) Aged 2.00*** (.17) >61 4.91*** (.18)	East North Central		2.11***	2.05**	2.13***
East South Central 3.67*** 3.80*** 3.63*** (.27) (.27) (.27) West South Central 2.30*** 2.42*** 2.10** (.25) (.25) (.25) (.25) Pacific 1.01 .97 .96 (.25) (.26) (.26) Marital Status ^c Divorced 1.00 .95 1.03 (.13) (.13) (.13) Separated 3.4** 3.6* 3.5** (.39) (.40) (.39) Never Married 4.9*** .81 .54*** (.14) (.16) (.14) Widowed 2.00*** 1.15 2.00*** (.15) (.16) (.15) Age ^d 35-60 2.00*** (.17) >61 4.91*** (.18)			(.23)	(.23)	(.23)
East South Central 3.67*** 3.80*** 3.63*** (.27) (.27) (.27) West South Central 2.30*** 2.42*** 2.10** (.25) (.25) (.25) (.25) Pacific 1.01 .97 .96 (.25) (.26) (.26) Marital Status ^c 1.00 .95 1.03 (.13) (.13) (.13) (.13) Separated 3.4*** .36* .35** (.39) (.40) (.39) Never Married .49*** .81 .54*** (.14) (.16) (.14) Widowed 2.00*** 1.15 2.00*** (.15) (.16) (.15) Age ^d 2.00*** (.17) >61 4.91*** (.18)	West North Central		1.69	1.72	1.69
West South Central (.27) (.27) (.27) 2.30*** 2.42*** 2.10** (.25) (.25) (.25) (.25) Pacific 1.01 .97 .96 (.25) (.26) (.26) Marital Status ^c 1.00 .95 1.03 (.13) (.13) (.13) (.13) Separated 3.4** .36* .35** (.39) (.40) (.39) Never Married .49*** .81 .54*** (.14) (.16) (.14) Widowed 2.00*** 1.15 2.00*** (.15) (.16) (.15) Age ^d 2.00*** (.17) >61 4.91*** (.18)			(.28)	(.28)	(.28)
West South Central 2.30*** 2.42*** 2.10** (.25) (.25) (.25) (.25) Pacific 1.01 .97 .96 (.25) (.26) (.26) Marital Status ^c 1.00 .95 1.03 (.13) (.13) (.13) (.13) Separated .34** .36* .35*** (.39) (.40) (.39) Never Married .49*** .81 .54**** (.14) (.16) (.14) Widowed 2.00*** 1.15 2.00*** (.15) (.16) (.15) Age ^d 2.00*** (.17) >61 4.91*** (.18)	East South Central		3.67***	3.80***	3.63***
Pacific 1.01 97 96 (.25) (.26) Marital Status ^c Divorced 1.00 95 1.03 (.13) (.13) (.13) Separated 34** 36* .35** (.39) (.40) (.39) Never Married 4.9*** 81 .54*** (.14) (.16) (.14) Widowed 2.00*** 1.15 2.00*** (.15) Age ^d 35-60 2.00*** (.17) 4.91*** (.18)			(.27)	(.27)	(.27)
Pacific 1.01 .97 .96 (.25) (.26) (.26) Marital Status ^c Divorced 1.00 .95 1.03 (.13) (.13) (.13) Separated 34** .36* .35** (.39) (.40) (.39) Never Married .49*** .81 .54*** (.14) (.16) (.14) Widowed 2.00*** 1.15 2.00*** (.15) (.16) (.15) Age ^d 35-60 2.00*** (.17) (.17) (.17) (.18)	West South Central		2.30***	2.42***	2.10**
Marital Status ^c			(.25)	(.25)	(.25)
Marital Status ^c 1.00 .95 1.03 Separated .34** .36* .35*** (.39) (.40) (.39) Never Married .49*** .81 .54**** (.14) (.16) (.14) Widowed 2.00*** 1.15 2.00**** (.15) (.16) (.15) Age ^d 2.00*** (.17) >61 4.91*** (.18)	Pacific		1.01	.97	.96
Divorced 1.00 .95 1.03 (.13) (.13) (.13) Separated .34** .36* .35** (.39) (.40) (.39) Never Married .49*** .81 .54*** (.14) (.16) (.14) Widowed 2.00*** 1.15 2.00*** (.15) (.16) (.15) Age ^d 2.00*** (.17) 4.91*** (.18)			(.25)	(.26)	(.26)
Separated $(.13)$ $(.13)$ $(.13)$ $(.13)$ Separated $.34**$ $.36*$ $.35**$ $(.39)$ $(.40)$ $(.39)$ Never Married $.49***$ $.81$ $.54***$ Widowed $(.14)$ $(.16)$ $(.14)$ Widowed $2.00***$ 1.15 $2.00***$ $(.15)$ $(.16)$ $(.15)$ Age ^d $2.00***$ $(.17)$ $4.91***$ $(.18)$	Marital Status ^c				
Separated 34** 36* 35** (.39) (.40) (.39) Never Married 49*** 81 .54*** (.14) (.16) (.14) Widowed 2.00*** 1.15 2.00*** (.15) (.16) (.15) Age ^d 35-60 2.00*** (.17) >61 4.91*** (.18)	Divorced		1.00	.95	1.03
Never Married (.39) (.40) (.39) 1.49*** .81 .54*** (.14) (.16) (.14) Widowed 2.00*** 1.15 2.00*** (.15) (.16) (.15) Age ^d 35-60 2.00*** (.17) >61 4.91*** (.18)			` '	` '	. ,
Never Married .49*** .81 .54*** (.14) (.16) (.14) Widowed 2.00*** (.15) Age ^d 2.00*** (.17) >61 4.91*** (.18)	Separated		.34**	.36*	.35**
Widowed (.14) (.16) (.14) 2.00*** 1.15 2.00*** (.15) (.16) (.15) Age ^d 35-60 2.00*** (.17) >61 4.91*** (.18)			, ,	(.40)	
Widowed 2.00*** 1.15 2.00*** (.15) (.16) (.15) Age ^d 35-60 2.00*** (.17) >61 4.91*** (.18)	Never Married			.81	
Age ^d 35-60 2.00*** (.15) (.16) (.15) 4.91*** (.18)			, ,	(.16)	1 /
Age ^d 35-60 2.00*** (.17) >61 4.91*** (.18)	Widowed		2.00***	1.15	2.00***
35-60 2.00*** (.17) >61 4.91*** (.18)			(.15)	(.16)	(.15)
(.17) >61 4.91*** (.18)					
>61 4.91*** (.18)	35-60				
(.18)				, ,	
	>61				
Neighborhood Racial Makeup 1.34**				(.18)	
	Neighborhood Racial N	Makeup			
(.10)					(.10)

Note: Standard errors are shown in parentheses Note: ^a reference is female; ^b reference is Mountain; ^c reference is married; ^d re

I also investigated neighborhood racial makeup, a possible mediating variable that was supported by my literature review. I found that, when controlling for neighborhood racial makeup, the odds ratio for veteran status was 1.47 and the significance of the relationship between veteran status and remained high at p<.01. This result is surprising, given that research has shown that higher rates of diversity in the neighborhood setting is related to greater tolerance for interracial marriage among Whites (Perry 2013).

6 DISCUSSION

The United States is an increasingly diverse country (Frey 2014) where interracial marriage rates are increasing. The United States military is also increasingly diverse (Office of the Deputy Assistant Secretary of Defense 2013) and purports to offer its members a racially equal workplace. Drawing from academic research and the military's own statements, I sought to investigate whether service in the military is related to more favorable attitudes toward interracial marriage, which is widely regarded as measure of social distance between race groups (Perry 2012; Kalmijn 1998). I hypothesized that service in the military would be related to less opposing attitudes toward interracial marriage for both Blacks and Whites. My results did not support my hypotheses: I found that there was no relationship between service and opposition for Blacks; and for Whites military service was actually related to more opposing attitudes. I also hypothesized that age or neighborhood racial makeup would mediate the relationship between veteran status and opposition, with younger people and those who live near people of another race being less opposed. I found that age does mediate the relationship between veteran status and opposition to interracial marriage. This discussion attempts to explain the patterns revealed by my research results.

For Blacks, service in the military was not related to attitudes toward interracial marriage. In other words, there was no difference between the attitudes of Black veterans and Black civilians. This was an unexpected finding that I suspect could be for a few reasons. One possible reason could be that Blacks continue to experience racial discrimination in the military similar to that experienced in the civilian realm. If Blacks continue to be segregated by race into different occupations from Whites, continue to have difficulty being promoted over Whites, and do not have positive interactions with people of other races in the military (Burk and Espinoza 2012), then it is unlikely that their experiences meet the criteria necessary to foster positive racial views under contact theory.

Another possible explanation could be that the selection of Blacks into the military does not discriminate between those who have positive views toward marriage with Whites. In other words, perhaps the interracial marriage attitudes of Blacks who do and do not join the military are about equal and, for those who do join, their attitudes do not change as a result of service in the military. Time spent in the military and the racial experiences acquired therein may not be enough to substantially change Blacks' attitudes toward marriage with a White person.

I anticipated that the military acts to reduce opposition to interracial marriage through contact between Whites and Blacks. Among Whites, although there was a relationship, it was in the opposite direction expected, with White veterans being more likely to oppose interracial marriage than White civilians. It is possible that seeking entrance into the military is dependent upon racial attitudes, though this study cannot determine the temporal order between military enrollment and racial attitudes regarding interracial marriage. I found that older people are more likely to be both veterans and opposed to interracial marriage. This could indicate that age, and the changing racial attitudes that have come with the passage of time in the United States, could

be the driving force behind the statistical relationship between veteran status and oppositional attitudes toward interracial marriage, at least among Whites.

Even though the military may recruit from the racially diverse subpopulations of the United States, segregation from people of other races during service may contribute to why White veterans are still more opposing of marriage with a Black person. If Whites are funneled into different occupations than Blacks and do not spend time cooperating and developing positive relationships with Black people, then perhaps the military experience for Whites does not meet the criteria for the favorable attitude change.

It could be possible that racial interactions in the military do lead to less opposition toward interracial relationships other than marriage. There is evidence (Lawrence and Kane 1996) that service in the military can lead to favorable racial attitudes for Whites under certain conditions, but it is unknown whether those attitude changes are permanent after military service ends. This study cannot gauge whether attitudes toward interracial marriage with Blacks or Whites changed specifically during service. There may be many veterans, for instance, whose attitudes were changed as a result of military service, but whose service was long enough in the past to have changed again during the intervening time in civilian life.

7 LIMITATIONS AND FUTURE DIRECTIONS

One limitation of the data I used is the race variable. Oversampling of racial groups in the GSS would afford me the opportunity to draw more conclusions about the role of race-related factors in attitudes toward interracial marriage for groups other than Whites and Blacks. This is a common limitation cited by researchers of interracial marriage (Jacobson and Heaton 2003). For example, although there are Hispanic and Asian veterans in the GSS for the most recent years, there were not enough to allow me to perform the statistical procedures used here. Further

research in this area should address the interracial marriage attitudes of people from these groups who join the military.

Another limitation of this research involves the interracial marriage attitude questions. They ask about attitudes toward marriage with a "close family member" and someone of a different race, and as such I could not draw definitive conclusions on the race of family member the respondent had in mind when answering. This obscures the possibility that the person in the respondent's mind is multiracial or even not of the same race as the respondent, which is a growing possibility given United States demographic changes (Frey 2014; Lee and Bean 2009). These questions also ask only about interracial marriage and do not address the growing acceptance of interracial cohabitation or dating (Pew Research Center 2010).

The most recent three survey years only contain information about the length of service, which I translated into a dichotomous variable for this project. Though the literature addresses rank in the military as it relates to interracial marriage attitudes (Jacobson and Heaton 2003), my analysis was limited to simple veteran status because of limitations in the information provided by the GSS. Future data collection efforts should gather more information on the circumstances of military service, such as rank, era of service, occupation, combat or support role, racial makeup of military workplace, and whether, for how long, and where members served overseas. Further research on this topic is needed. Specifically, research should address whether attitudes toward interracial relationships change during military service, which would call for longitudinal data collection. Research should also investigate a wider variety of racial attitudes among military members to gain a more detailed understanding of what attitudes—such as acceptance of friendship with someone of a different race—are affected, positively or negatively, as a result of military service.

8 CONCLUSION

This project is a step toward understanding the US military's relationship to attitudes toward interracial marriage for Blacks and Whites. Contrary to my initial expectations, results indicated that military service is associated with greater opposition toward interracial marriage among Whites, with no relationship among Blacks. The relationship between military service and attitudes toward interracial marriage was almost fully explained by age, which highlights a potential cohort effect and may indicate that the opposition toward interracial marriage among whites in the military may change among millennials.

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