### UNIVERSITY OF CALIFORNIA

Los Angeles

Thank You for Your Service? Diverging Pathways for People of Color within the Armed Forces

A dissertation submitted in partial satisfaction of the

requirements for the degree Doctor of Philosophy

in Sociology

by

Ryan Woon-Ho Cho

2022

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### ABSTRACT OF THE DISSERTATION

Thank You for Your Service? Diverging Pathways for People of Color within the Armed Forces

by

Ryan Woon-Ho Cho Doctor of Philosophy in Sociology University of California, Los Angeles, 2022 Professor Jennie E. Brand, Chair

Black and Latino men, particularly in metropolitan areas, are heavily recruited into military service, often told that enlisting in the armed forces will provide the means for both social and economic mobility. While all military enlistees experience relatively equal access to opportunities and resources while in the service, questions remain as to how racial and ethnic minority veterans, particularly those of the Global War on Terror, fare after leaving the service. This dissertation examines two life processes—the job application process and remarriage—to examine how such outcomes might differ for minority veterans. Chapter 2 and 3 use results from a conjoint survey experiment administered to a nationally representative sample of hiring authorities to examine how racial minority veterans are perceived by employers in the low-wage labor market. Chapter 2 focuses on Black men, and specifically compares military service to the educational credential of

an associate degree. In Chapter 3, the focus shifts to Latino veterans, further exploring how military service not only affects employers' perceptions of Latinos, but also how such perceptions might change based on one's place of birth. The results of the survey experiment show that military veterans experience a premium in the job application process and are more likely to be recommended for a follow-on interview; this premium is greatest for some groups that are traditionally the most disadvantaged in the application process, such as immigrants and GED holders. Chapter 4 turns its attention to the family, and examines the marital transition of remarriage, an outcome unexplored in previous work. Using data from the National Longitudinal Survey of Youth 1979, I find that the gap in remarriage rates found between Black and White men in the United States disappears in the military context. Such results suggest that socioeconomic prospects are the culprit for differences in remarriage rates found at large, and that the relatively equal socioeconomic standing of service members, irrespective of race and ethnicity, help promote remarriage rates. Taken together, my research helps update and expand our understanding of the impact of military service on the life course specifically for racial and ethnic minorities, and what these differences might imply for social stratification and inequality.

The dissertation of Ryan Woon-Ho Cho is approved.

Chad J. Hazlett

S. Michael Gaddis Jr.

Natasha M. Quadlin

Patrick C. Heuveline

Jennie E. Brand, Committee Chair

University of California, Los Angeles

2022

For my family.

To my parents, Tom and Helen, thank you for a lifetime of support and fostering a love of learning.

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### VITA

### RYAN W. CHO Doctoral Candidate, Department of Sociology University of California, Los Angeles

### **EDUCATION**

| 2019 | C.Phil, Sociology, University of California, Los Angeles             |
|------|--|
| 2016 | M.A., Sociology, University of California, Los Angeles               |
| 2013 | A.B., Political Science, Columbia University in the City of New York |

### ACADEMIC AND PROFESSIONAL EMPLOYMENT

- 2021 Research Scientist Intern, Demography and Survey Sciences, Facebook
- 2016-2019 Teaching Assistant, UCLA Statistical and Computer Methods for Social Research Race & Ethnicity in American Life (Reader) Sociology of Deviant Behavior (Reader) American Society Sociology of Crime
- 2018 Graduate Student Researcher for Dr. S. Michael Gaddis
- 2015-2016 Graduate Student Researcher, Los Angeles Education Research Institute

### **PUBLICATIONS**

Cho, Ryan W. and Jennie E. Brand. (2019) "*Life Chances and Resources*." Wiley Blackwell Encyclopedia of Sociology, 2<sup>nd</sup> Edition. George Ritzer and Chris Rojek eds., Blackwell Publishing. <u>https://doi.org/10.1002/9781405165518.wbeos1043.pub2/</u>

### SELECTED CONFERENCE PRESENTATIONS

| May 2021   | <i>"The Black-White Remarriage Gap: Reassessing Economic Prospects Using the Military Context."</i> (Poster). Population Association of America Annual Meeting (Virtual). |
|------------|---|
| April 2020 | <i>"Changes in the Racial Composition of Elite Universities."</i> (Poster) with Caitlin Ahearn.<br>Population Association of America Annual Meeting (Virtual).            |

### FELLOWSHIPS, HONORS AND AWARDS

| 2021 | Dorothy L. Meier Dissertation Year Fellowship                            |
|------|--|
| 2021 | Shirley Hune Inter-Ethnic/Inter-Racial Studies Award                     |
| 2021 | Institute of American Cultures Research Grant                            |
| 2021 | Eugene V. Cota-Robles Fellow, UCLA Graduate Division                     |
| 2020 | Summer Fellowship, UCLA Department of Sociology                          |
| 2018 | Traineeship, Eunice Kennedy Shriver NICHD                                |
| 2016 | Graduate Research Mentor Fellowship, UCLA Graduate Division              |
| 2015 | Summer Fellowship, UCLA Department of Sociology                          |
| 2013 | Distinguished Military Graduate, Army Reserve Officer Training Corps     |
| 2012 | Presidential Fellow, Center for the Study of the Presidency and Congress |
|      |  |

### **PROFESSIONAL SERVICE**

| 2021-2022 | Co-Coordinator, Experiments Working Group  |
|-----------|--|
| 2018      | President, Sociology Graduate Students' Association                                      |
| 2014-2016 | Graduate Students' Association Representative, Graduate Council, UCLA<br>Academic Senate |
| 2015-2016 | Co-Coordinator, Stratification, Inequality, and Mobility Working Group                   |

### Chapter 1: Introduction

For early scholars of social stratification, military service was recognized as a key experience in status attainment and social mobility. When Blau and Duncan (1967) wrote their foundational text, the military was a compulsory and widespread experience. For the veterans of World War II, service in the military ultimately increased socioeconomic prospects and expanded occupational opportunities for men of that generation (Sampson and Laub 1996). This was undoubtedly due to new initiatives, such as the Servicemen's Readjustment Act of 1944 (more commonly known as the GI bill), which democratized higher education to a broader population of men who would not have otherwise had the opportunity to pursue a higher education (Angrist and Krueger 1994; Bound and Turner 2002).

In 1973, the military moved from a force based on conscription to one of volunteers. This transition has largely meant that military service is concentrated to a far smaller group of individuals—in fact, recent estimates suggest that less than one percent of the U.S. population actively serves in the military (Chalabi 2015). The decrease in the ubiquity of such an experience has led to a subsequent decrease in social science research focusing on the effects of military service. Instead, researchers focus attention on the effects of higher education, particularly as more and more high school graduates choose to pursue a form of post-secondary education in the present day, and as research clearly demonstrates the positive effects of a higher education on a number of life outcomes (Belfield and Bailey 2011; Hout 2012). Yet, particularly for racial minorities within the United States, military service serves as a legitimate competing pathway to college (Hexter and El-Khawas 1988; Mare, Winship, and Kubitschek 1984). According to statistics from the Department of Defense, about 73,000 individuals identifying as racial or ethnic minorities enlisted into the military in fiscal year 2018, accounting for about 44% of all enlistments in that

year (CNA 2019). And like college, the military is a bridge to adulthood (Browning, Lopreato, and Poston 1973), serving as an experience that facilitates economic independence and promotes personal responsibility (Kelty, Kleykamp, and Segal 2010).

Yet, due to the decreased prevalence of military service in the country, limited samples within existing panel and survey data, and restrictions on information about service members and veterans imposed by the government, much of the existing scholarly research on veterans' outcomes is outdated, focusing on a very different, much more homogeneous group of veterans. Thus, a renewed focus on the outcomes of military service is required today for several reasons.

First and foremost, the demographic composition of the military has drastically changed in the past quarter century. In the 1990s, minority service members constituted less than a quarter of the active duty force; by 2017, this percentage had grown to 40%, making the military not only one of the most ethnically diverse workplaces in the United States (Barroso 2019), but also a workplace in which racial and ethnic minorities can regularly be found in positions of leadership (Moskos and Butler 1996). A corresponding shift in the demographic make-up of the veteran population, in turn, is expected to take place. Whereas less than a quarter of veterans in 2021 identified as racial and ethnic minorities, over a third of the veteran population in 2046 is projected to be racial and ethnic minorities (Schaeffer 2021). The existing academic research on the outcomes of racial minority veterans have focused primarily on differences found between Black and White veterans, but even this research is largely outdated, often using panel data that focuses on a different cohort of veterans (Lundquist 2006; Teachman 2007; Teachman and Call 1996; Teachman and Tedrow 2007). Moreover, outstanding questions remain as to how other demographic groups, such as Latinos, who make up a growing proportion of both the veteran population and the U.S. population as a whole, fare after military service. Consequently, researchers must update our understanding of the consequences of military service for minority veterans and continue to delve into what heterogeneity might exist for different demographic groups.

Furthermore, in the past year, the United States withdrew from Afghanistan, drawing an end to a 20-year conflict overseas. The Global War on Terror has been the longest military engagement the U.S. has been involved in during the nation's history, and yet, only a small percentage of the U.S. populace has participated. Such a conflict was unique on multiple fronts. First, it brought sweeping changes towards policies regarding recruitment and enlistmentallowing, for instance, a steady entry of immigrants to join the force in exchange for citizenship (McIntosh, Sayala, and Gregory 2011). Despite strong opposition to actions like the invasion of Iraq, Americans, in general, strongly approved of and supported service members involved in the conflict, sentiments not shared towards veterans of the Vietnam War (Rosentiel 2007). However, due to the greater social distance between the average American and military veterans, Americans have often had to rely on outside narratives about veterans versus direct contact with this group. Such narratives have often painted veterans as courageous and hardworking, while simultaneously pointing to veterans as troubled and struggling with disabilities like post-traumatic stress disorder (PTSD) (Stone and Stone 2015). Thus, as the veterans of this conflict grow to become the largest segment of the veteran population, it is imperative that we understand the unique challenges or outcomes this group of veterans may face.

Given the prevalence of military service as a viable post-secondary experience among racial and ethnic minorities within the United States, the research in this dissertation ultimately seeks to update and expand our understanding of the effects of military service for racial and ethnic minority veterans. I examine two specific life course outcomes associated with military service — job prospects and remarriage. Such research is important in continuing to understand how early adulthood experiences stratify groups within the United States.

### **Overview of the Dissertation**

Chapters 2 and 3 aim to examine the employment trajectories of Black and Latino male veterans. I use experimental data to focus on how likely job applicants with a history of military service are recommended for a follow-on interview for minimum wage positions, and how such veterans are perceived by potential employers. These chapters continue a long line of experimental research using survey experiments and audit studies that examines how the identities, experiences, and backgrounds of job applicants affect the initial stages of the hiring process (Gaddis 2014; Pager 2003; Pager, Bonikowski, and Western 2009; Pedulla 2014; Quadlin 2018). For this research, I implement a conjoint survey experiment on a nationally representative sample of employers obtained through YouGov to examine how job applicants with a history of military service compare to their civilian peers in the minimum-wage labor market. Conjoint survey experiments have specifically provided an accurate portrayal of behavioral patterns and attitudes toward job applicants, and have helped social scientists understand the mechanisms that drive their hiring decisions (Quadlin 2018).

Black and Latino men, particularly in metropolitan areas, are heavily recruited into military service, often told that enlisting in the armed forces will provide the means for both social and economic mobility. Although scholars debate the positive impact of military service in the labor market for veterans overall (Gade, Lakhani, and Kimmel 1991; Teachman and Call 1996), a number of studies have demonstrated the positive influence of military service on labor market outcomes for minority, and specifically Black, veterans. Bryant et al. (1993) finds that military

service provides greater returns for minority veterans compared to White veterans, and Angrist (1998) also finds a similar, albeit smaller, premium in the earnings of non-white veterans.

Chapter 2 specifically focuses on the population of Black male veterans, not only examining how military service is perceived by employers, but how such perceptions of military service specifically compare to other post-secondary path for high school graduates, to include community college. Although a higher proportion of Black high school graduates now enroll in a four-year college or university, the military, community college, and the labor force all serve as alternative options for Black high school graduates who do not pursue a four-year degree (Hexter and El-Khawas 1988), and Black men are overrepresented in these populations relative to their share of the U.S. population as a whole (Baylor 2016; Nzau 2020). Around 7% of Black high school graduates enlist in the armed forces soon after graduating high school, a higher proportion than both Whites and Latinos (BLS 2006). 19% of Black high school graduates attend community college, and 25% enter the labor force directly (Census Bureau 2021). A number of studies have demonstrated positive outcomes in terms of wages from both military service (Browning et al. 1973; Teachman and Tedrow 2007; Vick and Fontanella 2017; Xie 1992) and community college (Averett and Dalessandro 2001; Gill and Leigh 2003; Heckman, Lochner, and Todd 2008). Existing research has focused on comparisons between these post-secondary options and a fouryear college or university, yet few direct comparisons have been made between these alternative paths. Some of these post-secondary options, like the military and community college, are considered to provide skills and training which increase the human capital of those who experience them (Becker 2009). Results from the experimental data indicate that military service provides an advantage when it comes to being recommended for a follow-on interview, but that the educational credential of an associate's degree does not necessarily result in the same premium, at least in the low-wage labor market. These results confirm previous findings that suggest a premium in the hiring process for Black veterans in the present day.

In **Chapter 3**, I turn my attention to Latino veterans, a population whose growth has paralleled the growth of the Latino population as a whole within the United States. In the 1980s, fewer than 5% of service members identified as Latino, (Segal et al. 2007), but Latinos now make up about 15% of the active duty force as of 2017 (Barroso 2019). Some research has indicated positive outcomes from military service for Latino veterans in the labor market (Leal, Nichols, and Teigen 2011), but surprisingly, this group has remained largely understudied, especially considering projections that the population of Latino veterans will double in the near future (Livingston 2016). I also use this chapter as a further opportunity to examine how nativity status affects employers' perceptions of job candidates, and how military service may interact with an immigrant identity to modify such perceptions. Since 2001, over 100,000 immigrants have gained citizenship through military service (DHS 2019), and military service has been one way for minority groups to increase their perceived belonging in American society (Burk 1995). Despite this growing population of immigrant veterans, we have little understanding as to whether military service aids them with respect to employment.

There exists debate as to how Latino immigrants are perceived in the labor market. Some research has shown that employers often prefer Latino immigrant employees over Black employees in the low wage labor market because Latino immigrants are viewed as relatively hardworking and committed (Waldinger 1997). While employers make the case that Latino employees have better "soft skills," Zamudio and Lichter (2008) argue that Latinos are actually preferred because they are perceived as lacking savvy and bargaining power. However, other

research suggests that Latino immigrants experience a disadvantage because they may be perceived as illegal or a bad cultural fit (Almeida, Fernando, and Sheridan 2012; Menjívar 2011). Thus, although military service might provide the legal benefit of citizenship, an open question remains as to whether further premiums in the labor market exist. Moreover, this research also allows further examination into how native-born Latinos, both veterans and civilians alike, are perceived by employers. Prior research on employers' perceptions has not focused on separating and finding differences in perceptions towards Latinos as an ethnic group and nativity status. Findings from the survey experiment not only once again underscore the premium provided by military service in the job application process, but it also finds a premium for native-born Latinos. Latino immigrants, who are generally disadvantaged in the job application process (a finding confirmed in the study) achieve labor market outcomes in the low wage labor market on par with their native-born peers without a history of military service. The results in Chapters 2 and 3, taken together, indicate positive effects of military service, particularly for some demographic groups who are typically the most socioeconomically disadvantaged in the job application process for low-wage work.

Finally, in **Chapter 4**, I assess a family formation outcome. I use panel data from the National Longitudinal Study of Youth 1979 (NLSY79) to focus on another life outcome—marital transitions—and examine whether differences exist between Black and White veterans with respect to remarriage. Research on remarriage rates within the United States has found that Black Americans are less likely to remarry than White Americans (Bumpass, Sweet, and Martin 1990; McNamee and Raley 2011). Recent estimates suggest that although almost two-thirds of White divorcees can expect to remarry, less than half of Black divorcees are expected to do the same (Livingston 2014; Wilson and Clarke 1992). Although remarriage is a rarer phenomenon in the

present day, remarriage is an event that can help families and divorcees by improving outcomes like economic stability and personal well-being (Amato 2000; Smock 1990).

In this chapter, I examine whether such differences in remarriage patterns extend to the military context. Previous research on marital transitions within the military has found that the difference in rates found between Blacks and Whites in the American populace at large disappears, or even reverses. Previous studies using the NLSY79 have found that Black service members are just as likely, and potentially even more likely, to marry (Lundquist 2004; Teachman 2007), and less likely to divorce (Lundquist 2006; Teachman and Tedrow 2008). Researchers focusing on marital transitions in the military argue that differences in socioeconomic opportunity as well as factors like discrimination affect rates of marital transition in American society-that is, individuals find prospective partners who have stable economic prospects more attractive (Oppenheimer 1988). Because the military provides more equal access to opportunities and resources to service members, differences in marital transitions found between Black and White Americans at large are relatively nonexistent within the military context. The results of this chapter help to confirm and extend this theory, finding that Black service members not only have greater odds of remarriage than their Black civilian peers, but also White men, irrespective of their military status. Such results continue to imply that stable economic prospects help account for the difference in remarriage rates found in the civilian context.

This dissertation provides updates to the literature surrounding military service within American society. In particular, the research in this dissertation attends to the heterogeneous outcomes that military service provides to service members, not only by race and ethnicity, but by several other social background characteristics, such as educational attainment and nativity status. Ultimately, the goal of this research is to help illuminate how military service may or may not serve as a conduit of social mobility, particularly for racial and ethnic minorities in the United States and helps to further recognize the implications of military service in the social stratification of American society.

# Chapter 2: Does Veteran Status Substitute for a Credential? A Comparison of Military Service to Community College Degrees in the Labor Market

The transition to adulthood is marked by many paths. As high school graduation rates have increased, more and more American youth are choosing to pursue some form of higher education. A majority of these individuals now choose to attend four-year colleges and universities (BLS 2021), and previous research has made clear that of all options, attending a four-year university provides the greatest returns with respect to a number of life outcomes (see Hout 2012 for a review), whether that be in the form of socioeconomic outcomes, like wages and employment, or other outcomes like civic engagement (Brand 2010), psychosocial well-being, (Yang 2008), and even marital stability (Schwartz 2010). These advantages are often largest for those students who are the least likely to attend college (Brand 2022; Brand and Xie 2010). Still, not everyone chooses to attend a four-year college after graduation, and several other alternatives exist that mark the transition to adulthood. Some of these include entering the labor force directly, joining the military, or choosing some type of vocational or postsecondary education at a community college.

Oftentimes, these alternatives have been directly compared to attending a four-year college or university (Dougherty 1987; Kleykamp 2006), as attending and completing a four-year degree is considered a pathway to better employment and life outcomes. Less research, however, has focused on comparing these alternative paths to one another. Such paths, particularly that of military service and attending community college, serve as interesting juxtapositions to one another, not only because of how they are viewed similarly in a theoretical sense, but because they serve as competing options to one another among high school seniors (Hexter and El-Khawas 1988; Kilburn and Asch 2003). On one end, both experiences have often been considered "diversions" from four-year universities. Indeed, some scholars in the higher education literature have argued that students who attend community college are less likely to actually achieve a fouryear degree, and more likely to take longer to complete a degree if they transfer (Alba and Lavin 1981; Brint, Brint, and Karabel 1989; Rouse 1995; Schudde and Brown 2019). Less research on the military has directly labeled military service as a diversion from college, but scholars have pointed out that although educational aspirations are higher among military enlistees than other non-college going high school graduates (Kleykamp 2006), military service can interfere with eventual educational attainment , particularly for those service members who elect to continue their service long term (Cohen, Warner, and Segal 1995). However, research also suggests that both community college and military service can help facilitate the transition to four-year college attendance and completion. Brand and co-authors (2014) find that among individuals who would not have attended any schooling, attending community college increased transfer to four-year universities. Similarly, military service may only serve as a diversion in the short term, as the economic benefits provided by the GI bill not only increases enrollment of veterans (Bound and Turner 2002; Zhang 2018), but rates of college completion as well (Barr 2019).

Community college and military service are also similar in that they are both thought to provide training and skills that increase human capital (Becker 2009), which in turn, provide advantages in the labor market compared to individuals who choose to enter the labor market directly. However, like many experiences in the life course, the outcomes of such experiences are not uniform. Interestingly, it has been racial and ethnic minorities, and particularly Black Americans, who have been found to gain from these experiences when compared to their White counterparts. For instance, studies have found few benefits of military service for White male enlistees, but have consistently found positive effects for Black men in terms of employment and wages (Angrist 1990; Greenberg and Rosenheck 2007; Sampson and Laub 1996; Xie 1992), although some recent research suggest that these advantages only exist in the low-wage labor market (Renna and Weinstein 2019) and may depend on the job one held in the military (Kleykamp 2009). In the case of community college, researchers have found that Black men often experience a higher premium than their White peers (Averett and Dalessandro 2001; Gill and Leigh 2003), and that such a premium has grown over time (Heckman et al. 2008).

These benefits, particularly for Black men, can undoubtedly be partially attributed to the pervasive negative stereotypes towards Black individuals and the discrimination they experience in the labor market. In qualitative research, scholars have made clear that Black men, especially, are perceived as unskilled, uncooperative, and more difficult to manage (Kirschenman and Neckerman 1991; Waldinger 1997). Consequently, a record of military service or the credentials provided by a pursuit of higher education provide "counter-stereotypical" information to employers (Pedulla 2014), ultimately providing them a greater premium relative to their White peers. An alternative explanation posits that Black men benefit more from the skills they acquire; because Black men, on average, come from more socioeconomically disadvantaged positions, college and the military provide compensatory skills that make these experiences more advantageous for this group. Still, questions exist as to how the experiences of community college and the military are perceived by employers, and how they may differ between each other.

Examining these two pathways are fundamentally important in understanding socioeconomic outcomes for Black men, as this demographic group continues to be overrepresented in both the enlisted ranks of the military (Nzau 2020) and community colleges (Baylor 2016). Thus, in this chapter, I look to specifically compare the experience of having an associate degree with having served in the military, specifically focusing on the job application and hiring process. Many of the aforementioned benefits are materialized at this point of entry into the labor market and help determine outcomes like occupational attainment and wages. A number

of other social scientists have focused on the hiring preferences and decisions of employers (Gaddis 2014; Pager 2003; Pedulla 2014; David S Pedulla 2018; Quadlin 2018) in an attempt to further understand the mechanisms of how employers perceive certain traits and experiences. Using novel data from a national survey experiment, this chapter seeks to compare these two experiences in the civilian labor market and determine whether military service compares to an educational credential. Specifically, this paper examines how military service and certain levels of educational attainment (e.g. GED, high school diploma, associate degree) are perceived by employers in the low-wage labor market hiring process, and examines whether any differences exist in such perceptions by the race/ethnicity of the job applicant. I find that military service provides an advantage when it comes to being recommended for a follow-on interview, such that military veterans are more likely to be recommended than their civilian peers without a history of military service. I also find that holding an associate degree does not result in the same premiumassociate degree holders are no more likely than high school graduates to be recommended for an interview. I also find heterogeneity in these findings-the men who are the most disadvantaged in terms of educational attainment (those who possess GEDs) experience the greatest benefits from military service within the low-wage job application process.

### **Background and Theory**

### **Returns to Community College**

Individuals attend community college for several reasons. Community colleges are institutions that not only help prepare students for further academic pursuits in higher education, but also serve their communities by providing vocational and continuing education. Among the first group, community college may serve as a way for recent high school graduates who may be unsure about pursuing a four-year degree to test out the waters (Belfield and Bailey 2011). The available evidence regarding the returns to community college have demonstrated a number of positive returns to the education and training received (see Belfield and Bailey 2011 for a thorough review), but scholars have also been concerned with the fact that community college may serve as a diversion from four-year institutions, and that individuals who elect to go to community college are far less likely to transfer and complete a bachelor's degree (Alba and Lavin 1981; Brint et al. 1989; Rouse 1995; Schudde and Brown 2019). Others argue, however, that community college actually democratizes education for the masses, and that community college should not be immediately compared to a four-year alternative as the reasons for attending a community college differ from attending a four-year, and may help risk averse students further hone their academic skills and explore the pursuit of higher education in a relatively inexpensive manner (Adelman 2005; Belfield and Bailey 2011).

Despite these stated differences from a four-year degree (Monk-Turner 1994), attending community college for at least a single academic term has been consistently shown to provide positive economic returns (Ishikawa and Ryan 2002; Jaeger and Page 1996; Kane and Rouse 1995), although some research suggests "sheepskin effects", such that the benefits are greatest for those who actually complete the associate degree (Gill and Leigh 2003). The positive impacts of community college have been shown to be greater for Black students (Averett and Dalessandro 2001; Gill and Leigh 2003), and the size of this return has increased for more recent cohorts of community college attendees (Card and Lemieux 2001; Heckman et al. 2008). Averett and Dalessandro (2001) even find that the returns for Black men who began their education at community colleges and later transfer to four-year institutions to complete their bachelor's degree is even greater than for Black men who went to a four-year institution directly, although the authors

admit that this may partially be attributed to occupational sorting. Using this research as a foundation, this chapter seeks extend the literature on community college in three ways: (1) first, it seeks to confirm previous findings on the advantages of having an associate degree in labor market outcomes, specifically with respect to hiring; (2) it seeks to understand whether any heterogeneity exists based on race and ethnicity; and (3) it tries to make a more nuanced comparison to an alternative path—military service.

#### **Returns to Military Service**

Military service may be a more apt comparison to community college than attending a fouryear institution. Like individuals who choose community college, military service has often been viewed as another path that serves as the transition to adulthood (Kelty et al. 2010). Once an experience had by a majority of young men within the United States, the transition to an allvolunteer force has meant that military service is experienced by fewer individuals, particularly as access to higher education has increased. Like community college, though, military service is a path that may be chosen by individuals who may want to pursue a college degree, but do not believe they have the financial means to do so, or do not believe they are ready to pursue higher education immediately after high school (Kleykamp 2006).

The research on the benefits of military service on labor outcomes have been mixed, and highly dependent on the context of military service. Research on World War II veterans has made clear that the educational attainment of this cohort increased as a result of the GI Bill, with estimates suggesting that the educational attainment increased by 15-20% for the men who served (Stanley 2003). The effect of military service on wages earned during this period is less clear, with some research suggesting that the positive effect of service on wages found is probably a result of

selection into service (Angrist and Krueger 1994; Sampson and Laub 1996). For veterans of the unpopular Vietnam War, though, research suggests that these cohort of veterans actually suffered a wage penalty compared to those who did not serve (Angrist 1990). More recent work on the veterans of the all-volunteer force and later from the Global War on Terror suggest that veterans are more likely to be employed, and earn higher wages (DellaPosta 2013; Humensky et al. 2013; Kleykamp 2013; Xie 1992) than men who did not serve, which comes as an unsurprising result considering the positive views held towards this group by the American populace at large (Pew Research Center 2019).

Despite the mixed evidence on the effect of military service on socioeconomic outcomes, research has consistently found positive effects of military service for the most recent cohort of Black veterans. Black Americans are overrepresented in the military compared to the civilian labor force (Teachman, Call, and Segal 1993), and this increased presence of Black individuals in the military has been attributed to the appeal of a relatively meritocratic institution like the military where Black service members experience more equity in terms of pay and promotions (Booth and Segal 2005). A number of studies have demonstrated that Black service members are more likely to gain than their White peers in terms of socioeconomic outcomes, such that they earn more in terms of wages (Browning et al. 1973; Teachman and Tedrow 2007; Vick and Fontanella 2017; Xie 1992) and are less likely to be unemployed (Greenberg and Rosenheck 2007; Humensky et al. 2013). More recent research, however, suggests that these advantages may only be experienced in occupations with lower wages (Brown and Routon 2016). Renna and Weinstein (2019) find, for instance, that only veterans with occupations in the lower wage distribution see an advantage, whereas veterans in higher wage occupations actually experience a penalty for their service. Furthermore, White veterans have consistently been found to suffer a penalty from their service such that they actually earn less than their civilian counterparts (Angrist 1998). This penalty increases the longer one serves in the military, meaning that for White men, military service may not only serve as a diversion from higher education, but a true disruption from civilian life (Bryant, Samaranayake, and Wilhite 1993). Thus, research shows that particularly for Black men, the experiences of attending community college and enlisting in the military provides several advantages in terms of socioeconomic outcomes. I now turn to discussing what these experiences signal to employers, how they might be interpreted in the labor market, and why differences exist for White and Black men.

### What Do These Experiences Signal to Employers?

When employers are faced with the task of hiring an individual, they are often asked to make their decision based on limited information usually delivered in the form of a resume or cover letter. Under traditional economic theory, employers want to hire the best employees for the job, but actual measures of a potential employee's skills and productivity are often latent. Consequently, employers must rely on several traits to form impressions that ultimately help employers discern and choose between candidates. The process by which this occurs is most commonly explained by signaling or screening theory, but tenets of both are encompassed in the broader umbrella concept of the "sorting" model (Weiss 1995), which describes the process by which job applicants try to signal certain attributes to employers (Spence 1974), while employers use and interpret such signals to then "screen" applicants (Arrow 1973). Describing this framework under this broader concept is more nuanced in that it specifically delineates the actors within this process, as there is not necessarily a match between the signals job applicants would like to send, and the signals that employers receive.

A number of theories have been presented to explain why experiences, like college specifically, lead to greater returns in the labor market and higher wages (see Rivera [2020] for a review). Many of these theoretical explanations have also been used to help account for advantages held by military service numbers. Such explanations have largely been based in human capital theory, which argues that experiences like college provide individuals the training and skills that are valuable to employers. Employers, holding a preference for productive workers, choose individuals who they believe have the skills and talents necessary to perform the job, and it is thought that individuals with higher educational attainment have received training that provides the general skills and abilities that will make them better employees (Bills 2003), and help them increase their productivity (Becker 1993). A similar line of reasoning has been extended to veterans of the military. Research has shown that the military provides training that is often transferable to many civilian jobs (Mangum and Ball 1987), providing a potential explanation for why veterans experience advantages in the labor market, although some research suggests these benefits may not be equally distributed (Kleykamp 2009). Unlike the case of higher education, where the skills may be more amorphous, the military provides training in concrete areas that might be relevant to civilian occupations.

Yet many have disagreed with the assertion that premiums experienced in the labor market stem purely from rational decisions about actual skill or productivity. For one, social scientists have balked at the idea that employers make such rational assessments, and that such assessments are instead driven by a wide array of factors, to include emotions and personal biases (Castilla 2011; Fox and Spector 2000; Rivera 2012). Furthermore, researchers have often found evidence that departs from these human capital models. In the case of military veterans, Maclean (2017) finds that veterans with the least transferable skills (i.e. those who served in combat arms positions) suffered no penalty in the labor market compared to individuals who served in more administrative positions. Under the framework of human capital theory, it should be the veterans with the most immediate transferable skills that should benefit the most. Consequently, such research suggests that advantages provided by military service may stem from sources other than an employer's belief that the military provides skills and trainings that make veterans more effective employees.

A signal like education, then, has been postulated on one end as providing little or no substantive information about a job applicant's future work performance, to the idea that education helps to provide some supplemental information about a job applicant (Psacharopoulos 1979). A more moderate explanation posits that experiences like college stand in as a proxy measure for other attributes, like the ability to be trained (Thurow 1975), or signal abilities such as motivation and perseverance (Arkes 1999). Because of the nature of the college admissions process, education may also signal a job applicant's persistence and ability to pass a screening process. DeTray (1982) argues similarly that this screening process is the very reason why veterans experience advantages in the labor market. In addition to being representative of an increase in human capital, having served in the military demonstrates to employers that one has been able to pass a relatively rigorous screening process since the military sets the minimum standards of entry with respect to both physical and mental aptitude (MacLean and Elder 2007). Thus, employers prefer military job applicants because of the previous screening they may have undergone, much like the college admissions process does for individuals who pursue higher education.

A final explanation for the advantages of education in the labor market is grounded in credentialism. This theoretical framework was largely bolstered by *The Credential Society* (Collins 1979), and argues that education does not provide very good signals of an individuals' skills or talents. Instead, educational credentials are more of a signal that individuals are able to conform

to the cultural norms that employers may subscribe to (Brown 2001), and serves as a way for employers to promote exclusionary practices. Thus, education is a symbol of an accumulation of cultural capital—what Weber refers to as "social credit" (Weber 1922). The military, of course, has not been considered a "credential" in and of itself, but as a "total institution" (Goffman 1968), requires complete adherence to the cultural norms and institutional standards it sets. Consequently, the military has often been viewed as an experience that "knifes off" the previous experiences of those who serve, and allows them to begin anew (Brotz and Wilson 1946). Employers may view job candidates with a history of military experience, then, as ascribing to or embodying tenets of military culture, like discipline and attention to detail, that are generally valued in the labor force.

#### **Identity-based Signals and Discrimination Against Black Men**

Thus far, I have addressed signals which are directly related to human capital and training. Yet, other signals, particularly those based on identity and group membership, often become salient in the hiring process to employers, and also hold a demonstrable effect on hiring and wage outcomes (Pager et al. 2009). Employers, faced with limited information, use such signals from job applicants to develop perceptions and make decisions regarding hiring and pay. Their usage ultimately results in discrimination that is often categorized into two types—statistical and tastebased. Statistical discrimination occurs when employers use their past personal experience with members of certain social groups (e.g. race/ethnicity, gender, and class) to create and form opinions about the a group's average productivity and then evaluate, or "discriminate" against, job applicants who are members of these groups in accordance with such beliefs (Arrow 2015). For example, employers might believe that individuals who hold higher levels of educational attainment, on average, are more productive workers, and consequently, might discriminate against

those with lower levels of educational attainment. Statistical discrimination can also be extended to status identity and group membership. Employers may use their previous experience working with a sociodemographic group, like Black men, and then use this information to inform future decisions when dealing with members of that group. With this type of discrimination, this process is conceived as a rational, albeit flawed, way for employers to use the limited information they are provided. However, under discrimination of this type, beliefs and opinions are not thought to be rigid, but are instead malleable as new information and interactions occur. Thus, using the educational attainment example, employers would temper their discrimination against less educated individuals if, for instance, they worked with more highly educated individuals who were not as productive as they previously believed them to be. This differs from the other type of discrimination—taste-based discrimination—which is what is more commonly thought of when describing discrimination, and consists of the explicit exclusion of certain groups without reason (Becker 1971).

The case for statistical discrimination, however, is weak. Employers' actions and perceptions towards job candidates based on group membership are often distorted and misaligned with stated experiences with said groups. In a qualitative study of employers, Pager and Karafin (2009) found that employers consistently held negative views towards Black employees as a whole, even if they previously had direct and positive interactions with their own Black employees. These interactions, under statistical discrimination, should have tempered negative associations and connotations towards Black employees, but they did not. Such results suggest, then, that employers often revert to stereotypes and beliefs about status characteristics towards certain groups in framing perceptions and making hiring decisions (Berger, Cohen, and Zelditch 1972; Ridgeway 2001).

Employing such stereotypes in the hiring process often leads to negative labor market outcomes for certain groups, and particularly Black men. Experimental work in the social sciences has consistently found discrimination against Black men in the hiring process (Bertrand and Mullainathan 2003; Pager et al. 2009), such that Black men receive less call backs than their White peers, a trend that has remained steady over time. A meta-analysis of field experiments conducted by a team led by Quillian (2017) finds persistent racial discrimination against Black men as far back as the 1980s in hiring outcomes. Qualitative work has illuminated why such outcomes may exist. In numerous interviews and ethnographies, pernicious stereotypes surrounding Black employees as entitled, difficult to manage, and even threatening (Kirschenman and Neckerman 1991; Pager and Karafin 2009; Shih 2002; Waldinger 1997). Thus Black men, and particularly those in the low wage labor market in urban centers, face steep penalties based on their identities.

#### The Positive Consequences of Counter Stereotypical Information

Individuals, however, often hold onto multiple identities, or claim membership to multiple social groups and categories, and the resulting intersection of such identities may be interpreted by employers in various ways (Collins 2002). In the case of the experiences of college and the military, both of which have previously been shown by researchers to generally be associated with positive attributes and self-development, affiliations with both of these institutions may, for Black men, provide what social psychologists refer to as counter stereotypical information (Blair 2002; Blair, Ma, and Lenton 2001; Pedulla 2014; Power, Murphy, and Coover 1996). Within the social psychological literature, evidence suggests that this type of information mediates the negative perceptions that exist towards Black men. Peffley et al. (1997) find, for instance, that positive

information decreases negative perceptions held towards Black welfare recipients. However, in the labor market context, some evidence continues to show that in some instances, employers penalize Black men and discriminate against them when compared to their White peers even when positive information is presented. In an audit study on the effects of an elite college education in the labor market context, Gaddis (2014) finds that Black graduates of elite colleges find little to no advantage when compared to White graduates who attended less selective institutions. Such results suggest that the intersection of certain signals may not overcome the pervasive negative perceptions towards Black men.

How can we reconcile such contradictory findings? Recent research in social psychology helps to provide an answer. Petsko and Bodenhausen (2020) describe how and why the intersection of certain identities may result in a positive result in some instances, or result in more neutral or negative outcomes in other instances. They argue that individuals have a set of lenses with which they view others, and that the lenses employed are highly dependent on multiple factors, such as the context of the situation, and the goals of the perceiver. Thus, in certain contexts, the intersection of certain identities may not be as relevant, or a single identity may be more important than the other. In the context of welfare, then, the intersection of certain attributes may play out differently, such that the lens of racial stereotypes may be weaker than in the labor market context. Importantly, though, the authors note that their work provides a theoretical framework for how identities may be perceived, but does not actually explain what is being perceived.

Turning our attention to the case at hand, previous analyses of survey data have demonstrated that both the experiences of military enlistment and community college generally lead to better outcomes for Black men, even more so than their White peers. Thus, it is likely that Black job candidates will benefit if they have a history of military service or community college completion, a premise to be tested within this study. Importantly, this means that unlike previous research which has mainly focused on the comparison between Black and White job candidates, this chapter helps to examines two post-secondary paths for Black men to see if differences emerge between those who went to college and those who enlisted in the military. By doing so, this study hopes to better highlight what the specific experiences of college and the military signal, and further illuminate why certain experiences advantage Black men specifically.

# **Data and Methods**

Data for this study comes from a survey experiment administered by YouGov between the period of August 25 and August 30, 2021. This study received approval from the University of California, Los Angeles Institutional Review Board # 20-001543-AM-00001 in July of 2021. YouGov is a well-respected survey firm that has previously been used by researchers to conduct a wide array of survey experiments (Schachter 2016), and maintains a panel of individuals who are actively involved in the screening and hiring of employees. Individuals in the YouGov panel were first asked to participate in the sample if they served in one of several positions: (1) manager or assistant manager; (2) recruiter; or (3) other human resources professional. Respondents were further screened using several criteria to ensure that they matched the needs of the sample. These include that the respondents: (1) were actively and currently employed; (2) supervised a minimum of at least two individuals; and (3) was not actively serving in the U.S. military at the time of the survey. These restrictions ultimately led to a final sample of 372 respondents. Through the course of the survey, an individual initially rated two profiles at a time in tandem. After rating this initial pair of candidates, the respondents were shown an additional three pairs of profiles, such that each

respondent provided a total of six (6) observations per respondent. This resulted in 2,232 observations or candidate ratings.

Because no sampling frame exists with respect to retail managers within the country, the sample is inherently non-random, and consequently, these data cannot be further extrapolated to the general population of retail managers and hiring authorities. However, the design of the survey, described in the next section, means that I am able to produce internally valid estimates of the effects of military service and educational attainment on hiring outcomes (Pedulla 2016; Quadlin 2018). There is some limited data available from the American Community Survey that provides some estimates of the demographic breakdown for retail store managers throughout the country (BLS 2020). This data estimates, for instance, that almost 80% of retail managers in the country are White, and that 48% of managers are women. A table of descriptive statistics for my sample is shown in Table 2.1 below. When compared to the ACS, respondents in my sample differed slightly in that a higher proportion (91% vs 80%) of the sample identifies as White, and a smaller number of my sample are women (36%). The sample does provide good representation in terms of geography, with respondents equally represented from each region of the country.

|  | Sample       |
|--|--------------|
|  | Percent/Mean |
| Gender:  | (2.20%       |
| Male   | 63.20%       |
| Female   | 36.30%       |
| Other (Transgender/Non-binary/Two-Spirited)                                  | 0.54%        |
| Age  | 55.8 (10.6)  |
| Race/Ethnicity:  |              |
| White  | 91.10%       |
| Black  | 1.34%        |
| Hispanic   | 1.61%        |
| Asian  | 3.23%        |
| Middle Eastern   | 0.27%        |
| Native American  | 1.08%        |
| Other Identity   | 1.34%        |
| Born in the US   | 94.00%       |
| Education:   |              |
| High school graduate   | 2.96%        |
| Some college   | 9.68%        |
| 2-year   | 6.72%        |
| 4-year   | 36.60%       |
| Post-grad  | 44.10%       |
| Region:  |              |
| Northeast  | 18.8%        |
| Midwest  | 19.9%        |
| South  | 33.90%       |
| West   | 27.40%       |
| Number of people working for you   | 19.8 (54.3)  |
| Industry of Employer   |              |
| Agriculture, Forestry, Fishing and Hunting                                   | 0.81%        |
| Mining, Oil and Gas Extraction, and Utilities                                | 0.54%        |
| Construction   | 4.03%        |
| Manufacturing  | 7.53%        |
| Wholesale Trade  | 1.34%        |
| Retail Trade   | 6.45%        |
| Transportation and Warehousing   | 1.88%        |
| Media, Communications, and Digital Entertainment                             | 1.08%        |
| Finance, Accounting, and Consulting  | 7.53%        |
| Insurance  | 2.96%        |
| Real Estate, Rental, and Leasing   | 2.69%        |
| Personal Care and Services   | 1.61%        |
| Research   | 0.54%        |
| Engineering, Computer-Related Design, and Architecture                       | 5.91%        |
| Law and Legal Services   | 5.38%        |
| Education  | 16.40%       |
| Health Care and Social Assistance  | 8.06%        |
| Arts, Entertainment, and Recreation  | 1.34%        |
| Restaurant, Travel and Lodging   | 1.34%        |
| Non-profit, Community, Religious and Social Service Organizations            | 5.91%        |
| Maintenance and Repair Services  | 0.81%        |
| Government   | 5.11%        |
| Other  | 10.75%       |
| Ouici<br>Note: Standard Errors shown in parentheses for continuous variables | 10.7570      |

TABLE 2.1: Descriptive Statistics of Respondent Managers (N=372)

Note: Standard Errors shown in parentheses for continuous variables

# The Conjoint Survey Experiment

For this study, I employed a conjoint survey experiment, a method used to understand how various attributes-in the case of this study, educational attainment and military serviceinfluence or impact the preferences and decisions of respondents (Bansak et al. 2019). Researchers have used this method in fields spanning from marketing to the social sciences to understand topics ranging from voters' preferences and hiring outcomes (Green and Rao 1971; Schachter 2016). At its core, the method relies on showing respondents two profiles simultaneously (Druckman and Green 2021). Each profile lists a number of attributes in tabular form, where the value of each attribute is pulled from a pool of pre-selected values of interest to the researcher. Between each of the profiles, at least one but potentially all of the attributes are allowed to vary, leading to a variety of different permutations that might be presented to a respondent. Despite the complexities that this survey design presents, insofar as the design allows for an exponential number of combinations, a major advantage of the method lies in the relative ease with which one is able to calculate and interpret the effects of the change from one value of another attribute to another. Indeed, researchers, particularly in the field of political science, have demonstrated how the average marginal component effect (the name for average treatment effects in the conjoint framework) can be identified (Hainmueller et al. 2014). The AMCE, then, represents the difference in means between two values of an attribute, averaged over all levels of other attributes. For example, in the case of this study, the effect of holding an associate degree relative to holding a high school diploma, is merely the average difference in whether a candidate is recommended highly for an interview between these two levels of educational attainment.

The conjoint design proves to be advantageous in a number of other respects, and helps to alleviate several concerns that often arise from survey experiments. For one, there is often the concern that respondents answer questions without putting much effort into the survey, a phenomenon known in the literature as satisficing (Krosnick 1999). The conjoint design, by showing two profiles simultaneously, has been shown to increase the engagement and motivation of participants, as providing a point of comparison makes the task of evaluating a candidate or profile easier (Hainmueller, Hangartner, and Yamamoto 2015; Hainmueller, Hopkins, and Yamamoto 2014). Second, there are often concerns, particularly in evaluations related to contentious topics like race and ethnicity, that responses may be subject to social desirability bias, where a respondent may choose a more politically correct response than responding with their true beliefs. Because the respondent may be presented with two from a number of different combinations of profiles, the conjoint design makes it difficult for the respondent to pinpoint the actual subject of interest, when, in fact, there may be multiple as is the case with this study (Horiuchi, Markovich, and Yamamoto 2018; Schachter 2016). Finally, surveys are often criticized in that there is a disconnect between how an individual responds to a survey, and how they would react in a real life situation. Although this is difficult to validate, some work has shown within the voting context that the conjoint survey experiments can be externally valid. Using data from Switzerland, Hainmuller et al. (2015) find that results from a survey experiment match survey data regarding voting referendums. Thus, the conjoint survey experiment serves as a robust tool used by researchers to understand and highlight preferences and opinions of respondents.

# **Survey Design**

Within this survey, respondents were asked to imagine they were hiring for a full-time sales associate at a large national retail chain. Information provided to the respondent emphasized that the profiles presented would only provide limited information about prospective job candidates, and that the focus was primarily on understanding and eliciting initial impressions towards these candidates. Respondents were then shown a pair of job candidate profiles in tandem, and then asked to rate each candidate on how likely they would recommend the candidate for a follow up interview from a scale of 1 to 7—"If you met someone like [David], how likely would you recommend them for an interview based on your initial impression?" After evaluating this pair, the respondent rated an additional three pairs of candidates. Respondents were also asked a series of demographic questions about themselves, to include their age, race/ethnicity, gender, annual income, educational attainment, previous military service, and region of residence.

There were two primary experimental manipulations of interest within the study. The first of these was the effect of a history of military service, which was operationalized through previous occupational work history. To convey that one was a veteran, the profile specified under previous occupation that an individual had served in the military as either a soldier in the U.S. Army or sailor in the U.S. Navy. The other profiles with civilian work histories displayed one of several retail positions at large national retail chains. In the analysis, these categories were collapsed into a binary measure of having served in the military or not. The second experimental manipulation of interest was level of educational attainment. I allowed this to vary between a form of secondary education, such as a high school diploma or equivalent (GED), and a post-secondary credential in the form of an associate degree. Although not the main focus of this paper, a final experimental manipulation provides insight into how the effects of military service and a community college degree differ between White and Black job candidates. In addition to explicitly stating a candidate's ethnicity in the profile, names were added to candidate profiles in order to reinforce these signals and provide an aid for better recall. This pool of names were derived from the most popular baby names in the 2000s. Names were not reused among the profiles viewed by a single respondent, such that a respondent who viewed a profile with a name never saw that name again in subsequent profiles.

Several attributes about the candidates were added to the profiles in order to provide more information about the candidates, but they remained fixed across all profiles. This was done so that I could control for more variation that might explain the treatment effects (Dafoe, Zhang, and Caughey 2018), and also to further mask the attributes under investigation. All respondents were told that each candidate had left their previous occupation on good terms with three years of work experience. I varied the age between 23 and 25 to ensure that individuals understood that the job candidates were young adults and to keep consistent with other profile attributes, so that there was no room for large gaps in work or educational histories. Because of sample size limitations and concerns with statistical power, the job candidates were all described as men. This was also done because of the low percentage of women serving in the U.S. military. A full description of all the permutations are displayed in Table 2.2 below.

| Name                | White  | Black  |  |
|---------------------|--|--|--|
|                     | Alexander, Cole, Jacob, Luke, Noah   | Isaiah, Anthony, Brandon, Jayden,  |  |
|                     |  | Caleb  |  |
| Gender              | Male   |  |  |
| Age                 | 23-25  |  |  |
| Ethnicity           | White, Black   |  |  |
| Education Level     | High School Diploma, GED, Associate's Degree   |  |  |
| Previous Occupation | <i>Civilian</i><br>Best Buy Sales Associate, Old Navy<br>Sales Associate, Starbucks Barista,<br>Target Sales Associate | <i>Military</i><br>U.S. Army Infantryman, U.S. Army<br>Supply Specialist, U.S. Navy Sailor |  |

## **Analytic Strategy**

The outcome of interest for this study was whether a candidate is highly recommended for a follow-on interview. The original survey question asked respondents to rate candidates on a Likert scale from 1 (not likely at all) to 7 (very likely), but this outcome was transformed into a binary measure of "highly recommended" (6 or 7) or not (all other values). This was done for several reasons. First, using an outcome in this format matches the one often investigated in comparable resume audit studies, which is whether a job candidate receives a call back from a potential employer (Gaddis 2014; Pager 2003; Pedulla 2016; Quadlin 2018). Second, previous research suggests that employers only respond to candidates towards which they have strong positive feelings (Pedulla 2016).

Within the analysis, I first explore how the percent of candidates highly recommended differ on the primary experimental manipulations—military service, educational attainment, and race/ethnicity. Once again, this percentage difference represents the average marginal component effect (AMCE), which is the difference between two values or levels of an attribute (Hainmueller et al. 2014). In the case of military service then, the difference found between veterans and non-veterans shows the effect of military service on whether a job candidate was highly recommended for a follow-on interview or not. After exploring these differences, I then explore how the experiences of military service and community college differ for both Black and White male job applicants. Finally, I explore how the intersection of these three traits and identities interact with one another to further explore heterogeneity and determine whether military service advantages the least advantaged in terms of educational credentials.

### Results

### Employer Recommendations Based on Race/Ethnicity, Military Service, and Education

|  | Dependent variable:                 |
|--|-------------------------------------|
|  | Highly Recommended<br>for Interview |
| Military Veteran (Ref: Civilian)         | 0.06* (0.02)                        |
|  |                                     |
| Educational Attainment (Ref: HS Diploma) |                                     |
| GED                                      | -0.06*                              |
|  | (0.03)                              |
| Associate Degree                         | 0.08**                              |
| -  | (0.03)                              |
| Black (Ref: White)                       | 0.05**                              |
|  | (0.02)                              |
| Observations                             | 2,232                               |

 TABLE 2.3: Average Marginal Component Effects on Recommendation for Interview by Candidate Attributes

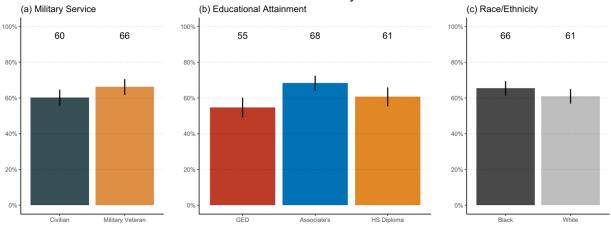
Note: Standard errors in parentheses.

\*p<0.05 \*\*p<0.01 \*\*\*p<0.001

Table 2.3 above lists the average marginal component effects of each of the major experimental manipulations of interest within the survey. The AMCEs, in this case, represents the percentage point difference in whether a candidate was highly recommended for an interview between the stated group and the reference category. Turning our attention to military veterans, employers were 6% more likely (p<0.05) to recommend job candidates with a history of military service compared to job candidates with previous retail experience, made evident by the estimates displayed in Table 2.3. In the case of educational attainment, I find that a job candidate with an associate degree experiences a similar, albeit greater, advantage, such that completing this post-secondary degree improves the probability of being highly recommended by about 8 percentage

points compared to candidates with a high school diploma. Having a GED, however, results in a penalty—job applicants with a GED are 6% less likely to be highly recommended for an interview compared to high school graduates. This also means that associate degree holders are almost 15% more likely to receive such a recommendation in comparison to other job candidates who hold a GED. In both instances, such results tentatively suggest that military service and postsecondary education serves as a positive signal in the hiring process. Although this comparison is not the primary focus of this paper, Table 2.3 also displays a small but statistically significant difference between Black and White male job applicants. However, this difference seems to depart from previous experimental and survey research that that finds a penalty in the hiring process for Black men. Indeed, the results indicate that Black job candidates, on average, have a 5% higher probability than their White counterparts of being recommended highly for an interview.

FIGURE 2.1: Probability of Being Highly Recommended by Military Service, Educational Attainment, and Race/Ethnicity



Because the depiction of AMCEs shows the difference but does not provide the context within which these differences are found, I also display the predicted probabilities of being highly recommended for an interview in Figure 2.1 above, with panels separated by military service, educational attainment, and race/ethnicity, respectively. Broadly, Figure 2.1 shows that a majority

of job candidates within each category have at least a 50% likelihood of being highly recommended for a follow-on interview. Figures 2.1a and 2.1b specifically focus on our main two experiences of interest: military service and educational attainment. Finally, Figure 2.1c displays the probabilities of being called back by race and ethnicity. I now turn to how the experiences of military service and community college compare for both Black and White applicants.

# How Does the Military Compare to Community College for Black and White Job Applicants?

One aim of this chapter is to understand how military service and community college compare to one another, and whether these experiences result in different hiring outcomes for Black and White job candidates. In the previous section, the results suggested that both military service and the completion of an associate degree had a positive impact in the hiring process. To explore how hiring might differ for different groups of job applicants, I now model whether a job candidate was highly recommended for an interview by race and ethnicity, and once again, display the average marginal component effects in Table 2.4 below.

|  | Depender        | t variable:                         |  |
|--|-----------------|-------------------------------------|--|
|  | •••             | Highly Recommended for<br>Interview |  |
|  | Black           | White                               |  |
| Military Veteran (Ref: Civilian)         | 0.06*<br>(0.02) | 0.06*<br>(0.02)                     |  |
| Educational Attainment (Ref: HS Diploma) |                 |                                     |  |
| GED                                      | -0.10*          | -0.01                               |  |
|  | (0.04)          | (0.04)                              |  |
| Associate Degree                         | 0.02            | 0.13***                             |  |
|  | (0.03)          | -0.04                               |  |
|  |                 |                                     |  |

| TABLE 2.4:                  | Average Marginal Component Effects on Recommendation for |  |
|-----------------------------|--|--|
| Interview by Race/Ethnicity |  |  |

Note: (Standard Errors in Parentheses)

\*p<0.05 \*\* p<0.01 \*\*\* p<0.001

Results reported in Table 2.4 show that military service provides both White and Black men a ~6% higher probability of being recommended for another interview. Thus, there is relatively little difference in the positive effect of military service between these groups, when we compare military veterans to their civilian counterparts by race (averaging the effect over various levels of educational attainment). This departs from previous findings which have found a larger advantage for Black than White veterans. These results suggest instead that military veterans experience a similar advantage regardless of race and ethnicity. However, even though Black and White veterans face a similar advantage compared to their civilian peers, only looking at the AMCE masks the difference in overall probability that exists between Black and White male job applicants. For this reason, I display the predicted probabilities for being recommended for an interview by race and history of military service in Figure 2.2 below. I find that although the advantage for veterans may be similar, Black veterans are overall more likely to be recommended than White veterans for a follow-up interview. Whereas White veterans are recommended for an interview at a rate of 64%, Black veterans are recommended for an interview at a rate of 68%, meaning that the odds of receiving a high recommendation are 10% higher for Black veterans than White veterans.

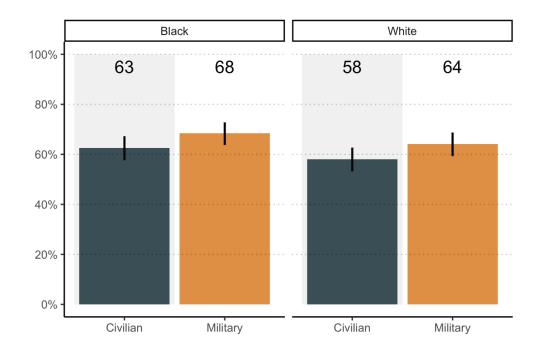


FIGURE 2.2: Predicted Probability of Being Highly Recommended for an Interview by Race/Ethnicity and Previous Military Service

There exists more heterogeneity when we compare the probability of recommendation based on educational attainment. Whereas White men with associate degrees are 13% more likely to be recommended for an interview compared to White job applicants with a high school diploma, this is not the case for Black men. Although point estimates show a marginal advantage, this estimate is not statistically significant, suggesting that employers are no more likely to recommend Black men with an associate degree than Black men with a high school diploma. Furthermore, although there may not be an advantage for Black men who have pursued higher education, Black men with a GED face a penalty in the hiring process. Black men are 7% less likely than other Black job candidates with a high school diploma of being recommended for an interview. Once again, this pattern does not extend to their White peers—White job applicants had similar probabilities of being recommended for an interview regardless of whether the applicant completed a GED or held a high school diploma.

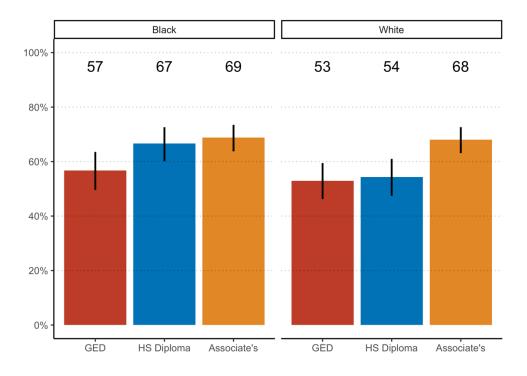


FIGURE 2.3: Probability of Being Highly Recommended for an Interview by Educational Attainment and Race/Ethnicity

Figure 2.3 above displays the probabilities of being recommended for an interview for job candidates at each level of educational attainment across race and ethnicity. For individuals who hold an associate degree, I find similar likelihoods of being highly recommended for an interview between Black and White job candidates—that is, the rates of being called back for both Black and White men are essentially the same. Black men who hold a GED have a 57% probability of being highly recommended for an interview, while White men have a 53% probability of being highly recommended for an interview. The advantage we see in prior analyses for Black job candidates, then, is a result of differences found among high school graduates. Black job candidates who hold high school diplomas have a 12.25% higher probability of being

recommended than their White peers. This also means that the rate at which Black high school graduates are recommended is actually on par to the rate that both White and Black job applicants who have an associate degree. Indeed, Black high school graduates received a strong recommendation for an interview at a rate of 67%, whereas Black community college graduates experienced similar recommendation rates of 69%, and White community college graduates experienced rates of 68%. Such findings seem to depart from previous evidence which finds that Black men are disadvantaged relative to their White peers in the hiring process, and instead illustrate what appears to be a penalty for White men who are high school graduates.

If military service provides an equal advantage for both Black and White job applicants, a final issue that remains to be explored is whether the effects of military service might vary not only by race/ethnicity, but by level of educational attainment. I explore this question below in Figure 2.4, which displays a graph of predicted probabilities accounting for race/ethnicity, educational attainment, and military service simultaneously. What we see here is that across race/ethnicity and level of educational attainment, job candidates with a history of military service experience a 6-8 percentage point advantage compared to their civilian peers. There are several additional interesting results for further review. First, military service provides a large advantage for job applicants with a GED. For Black job candidates, specifically, this means the rate at which military veterans with a GED are recommended (60%) becomes similar to the rate at which Black high school graduates without a history of military service are recommended (63%). Such results tentatively suggest that military service helps to close the gap between Black GED holders and high school graduates in hiring. In the case of White job candidates, a history of military service results in an advantage compared to White high school graduates without a history of military service

service (although the gap found between Black job candidates with a GED and Black job candidates with a high school diploma does not exist among White job candidates).

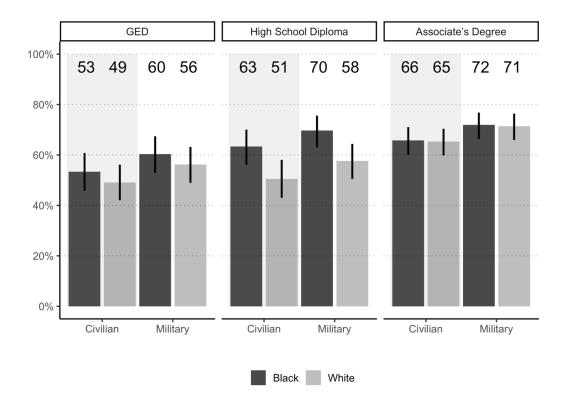


FIGURE 2.4: Probability of Being Highly Recommended for an Interview by Race, Military Service, and Educational Attainment

On the other end of the spectrum of educational attainment, I find patterns consistent with previous findings for Black job applicants who hold associate degrees—there exists no relative advantage for those who hold this postsecondary credential compared to their peers who hold high school diplomas. This finding does not differ by history of military service. Black veterans with an associate degree are highly recommended for an interview 72% of the time, while Black veterans with a high school diploma are recommended at a very similar rate of 70%. Thus, it appears that although military service provides an advantage, a job applicant with the additional credential of an associate degree does not experience any further premium within this hiring

context. Consequently, no interactive multiplicative advantage exists for military veterans with an associate degree, regardless of race/ethnicity.

### **Employer Views on Educational Attainment and Military Service**

At the end of the survey experiment, respondents were given the opportunity to write any additional comments they had in response to the survey. Although not every participant chose to provide comments, participants used this section to provide some of the rationale and justification they used to come to their decisions. With respect to military service, many employers consistently had strong praise for military veterans:

- 1. "I'll take someone with military experience any day of the week because those folks have had personal accountability and discipline instilled in them by virtue of that experience."
- 2. "People with honorable discharges from the military must be reliable [and] work hard."
- 3. "When making a decision regarding hiring, discipline, experience and character are key... the military DOES give you the skills to be more productive and successful."
- 4. "I also think the military is great for instilling work ethic and punctuality."
- 5. "I am biased towards hiring military people. They work by the job and not by the hour. They respect authority."

Many of these responses acknowledge or hint at the ease with which managers might be able to supervise military veterans, and that they find them hardworking and disciplined, more so than their civilian peers.

There were also several comments related to educational attainment and its impact within the context of hiring for a retail sales associate. A few survey respondents expressed unease with job candidates who only held a GED. As one employer stated, "I tend to avoid candidates who did

not have enough personal discipline to remain in high school and graduate." Another employer remarked "And while [a] GED education is not the red mark it used to be, it does usually show that the person had a problem in high school either with attendance, violence, following rules, drug use... and got kicked out of school and needed to get [a] GED to complete [their] education." Both of these comments illustrate that the GED is a cause for concern for these employers because it signals a previous history of delinquency. Another response spoke directly to an interesting finding of this study—associate degree holders find no advantage relative to their high school graduate peers in being recommended for a follow-on interview for a retail sales associate position. One employer expressed that "college, even a JC, begins to teach folks to cop an attitude that doesn't lend itself to sales." Here, the respondent expresses concern with this type of job candidate primarily because they believe that an employee with such an educational credential might prove to be more demanding or entitled, particularly within the sales context. Such a comment insinuates that college may not hold an advantage within the specific retail context. Ultimately, these openended responses help provide some limited qualitative evidence to further expand upon the results I find in my analysis.

### **Discussion and Conclusion**

Pursuing postsecondary education at a community college and enlisting in the military both serve as viable alternative options for high school graduates, especially for Black men. An aim of this study was to understand how these two experiences might be perceived differently by employers in hiring outcomes in the low-wage retail setting. Using a conjoint survey experiment, the results suggest first that military service provides a premium in the minimum-wage labor market, and this finding persists regardless of educational attainment or race and ethnicity. Such findings seem to provide concrete evidence in this specific labor market context for positive effects of military service. Such findings provide support for other research suggesting military veterans experience an advantage even when there may be concerns about issues with post-traumatic stress that service members have from their time in the military (Stone and Stone 2015). However, the advantages I find from this study may be limited to the occupation tested in the scenario—that of a minimum-wage retail associate. Some research suggests that within the labor market, military veterans are seen as individuals who are good at receiving direction and following orders. Positive perceptions of veterans may apply in the case of task-oriented occupations, such as the retail sales associate tested here, but may not extend to positions that require more creativity and provide more latitude to the employee (Shepherd, Kay, and Gray 2019). Whether a veteran advantage applies to other occupations and fields remains to be explored.

When it comes to the effect of an educational attainment in the low-wage labor market, I find that the effects differ by race and ethnicity. For Black job candidates, men with a GED are penalized compared to their peers who are high school graduates. The penalty for individuals with a GED echoes findings from sociologists like Rumberger (2012), who finds that high school dropouts who later earn a GED face significant challenges in the labor market, doing no better than drop outs themselves. However, the results of this study suggest that a history of military service can help mitigate the penalty experienced by individuals who hold a GED in the job application process. For Black men with a GED, a history of military service increases the likelihood of being highly recommended for an interview, such that the likelihood is the same as that of Black high school graduates. For individuals who hold a GED, then, military service may serve to not only provide "counter stereotypical information" about a job candidate who holds a GED (Blair 2002;

Blair et al. 2001; Pedulla 2014; Power et al. 1996), but as previous research has found, serve to "[knife] off" the previous life experiences of military veterans (Brotz and Wilson 1946).

Among Black men, I also find that those who hold an associate degree are no more likely to be highly recommended for an interview for the retail sales associate position. The results seem to suggest that an associate degree does not provide value added in the context of these minimum wage retail positions. Such a finding seems to fall in line with Pedulla's (2018) idea of "muted congruence," a situation in which additional information about a job candidate, in this case an associate's degree, provides redundant information about skills and abilities compared to high school graduates, resulting in no further advantage for such candidates. Alternatively, as one of the comments in open-ended responses suggests, applicants with a higher education credential may be viewed as more difficult to manage in a sales or retail setting. As a result, I attribute such a finding to the context of the scenario presented to respondents-the hiring of a minimum-wage retail associate. Previous research has made clear that a community college credential provides advantages in the labor market (Belfield and Bailey 2011), but the advantage may not be as great in these types of occupations. If, as this study suggests, there is no added benefit from having such a credential in the low-wage labor market, individuals may only realize economic benefits in other occupational trajectories.

Another key finding related to community college credentials in this study is that although military service, in and of itself provides an advantage in being recommended for position in the retail space, there is no further advantage in applications for these positions for veterans with an associate degree. Thousands of service members pursue community college and an associate degree both during their time in service and afterwards as they transition to civilian life (Field, Hebel, and Smallwood 2008). A high proportion of veterans, particularly from this current generation, choose to pursue their degrees and credentials from for-profit colleges (Harkin 2010), schools which have been shown to provide little to no advantage for their graduates. Although this study did not test whether the type or quality of the school changed the effects of an educational credential, there is the potential that the types of credentials that veterans hold may be even more precarious than that found within the study. Alternatively, veterans with associate degrees may not experience advantages in applying for retail positions like their civilian peers, but may experience a multiplicative advantage in other career fields. Such an assertion remains to be explored in future studies.

Perhaps the most surprising result of this study is the penalty I find experienced by White male high school graduates compared to Black high school graduates. Such a finding departs from studies showing consistent discrimination against Black job candidates (Pager et al. 2009). There are several potential explanations for such a finding. First, the result may be reflective of occupational sorting in the present day. A recent report from Brookings highlights the fact that Black Americans are overrepresented in the low-wage workforce (Bateman 2019). Consequently, this finding may reflect the funneling of Black men, in particular, into minimum-wage occupations that already exists. Employers, using their past or present experience, may hire those they are familiar with, which in the case of minimum-wage jobs, is more likely to be Black applicants and employees. Second, the penalty found for White high school graduates may exist because of negative perceptions that exist towards these job candidates who only have a high school diploma. According to data from the National Center of Education Statistics (2020), a larger share of White high school graduates go on to attend college compared to Black high school graduates. Consequently, holding only a high school diploma may also serve as a piece of "counter stereotypical" information for employers who have the expectation that White high school graduates should attend college, and therefore, culminate in the penalty found for White high school graduates. Of course, a final possible explanation for such a result is due to social desirability bias. The conjoint survey experiment is designed to mitigate the effects of such bias (Horiuchi, Markovich, and Yamamoto 2018), and seemingly, if the findings were a result of such bias, it is not entirely clear why Black high school diploma holders would benefit from this bias, but the most disadvantaged group, Black GED holders, are not shown to receive the same advantage. Nevertheless, the presence of such bias cannot be completely excluded as a possible explanation for such a result.

Overall, differences by level of educational attainment in this specific study also highlights the fact that employers rely on signals from education in their decision making process, even when job candidates have a history of relevant work experience.<sup>1</sup> According to human capital theory, employers use education in the absence of more relevant labor force indicators as signals of productivity and skill, but when presented with more relevant information, such as previous job history, employers should resort to using this information as another potential and more recent indicator of future performance. The results of the survey experiment show that educational attainment still plays an important part in the screening and interview process, at least within these types of positions.

As with every study, this one was subject to some limitations. First, the study did not explore how military service and a community college credential affect the hiring and labor market outcomes of women. Due to the relatively small proportion of women in the military, and limitations with the number of permutations I was able to test to preserve statistical power, I deliberately exclude women from this particular study. Women, however, attend college at higher

<sup>&</sup>lt;sup>1</sup> Employers were told at the beginning of the survey that all individuals left their previous positions on a positive note with three years of work experience.

rates than their male counterparts (National Center of Education Statistics 2020), and Black women, especially, are overrepresented within the armed forces relative to their share of the U.S. population (Teachman et al. 1993). Thus, the effects of these post-secondary experiences, on the perceptions of employers are important to understand, and future research should continue to understand how these experiences might result in heterogeneous outcomes for women. Second, there is always the question as to whether the way survey respondents act in the experiment reflect the way they would act in a real-life setting. Third, I attribute many of the findings to the specific context of applying for a minimum-wage occupation, and consequently, this study may not reflect advantages or disadvantages in other employment contexts. Despite such criticism, the conjoint survey experiment continues to serve as one of the best instruments by which we understand perceptions and identify causal effects of how certain attributes and traits affect hiring outcomes.

Ultimately, the results of this study indicate a potential change in the landscape of hiring, particularly into minimum-wage positions. This study has uncovered and extended several unique findings in terms of employer preferences and hiring. I find that military service helps improve recommendations for interview among job candidates applying for minimum-wage retail positions, but that an associate degree may not do the same. This study also hints at a potential penalty for White men who only hold a high school diploma. Particularly as rates of college-going continue to rise among high school graduates, and the overseas conflicts in which the military has engaged in the past two decades come to a close, it is important that research continue to attend to how both of these experiences shape the occupational trajectories and choices of young adults within the United States. Such changes inherently hold important implications for shaping the American landscape of stratification and inequality.

# Chapter 3: Te Quiero Para el Ejército—The Effect of Military Service on Perceptions of Latino Job Candidates

Latin Americans are the fastest growing segment of the United States population. According to estimates from the U.S. Census Bureau, the increase in the Latino population accounted for more than half of the increase of the total U.S. population from 2010 to 2019 (Noe-Bustamante, Lopez, and Krogstad 2020). Such a growth has been paralleled by a marked increase in the participation of Latinos in the United States military. Though fewer than 5% of members of the armed forces in the 1970s and 1980s identified as Latino (Segal et al. 2007), they have now increased their representation in the military substantially, making up about 15% of the active duty force as of 2017 (Barroso 2019).<sup>2</sup>

Despite this substantial change in the composition of enlistees to the U.S. military and the continued increase in the Latino population that is expected to occur over the next few decades (Census Bureau 2018), much of the existing research on military service has focused on the population of White and Black veterans. Far less is known about the outcomes of other minority groups, including Latinos, and in particular, their transition to the civilian sector as they become veterans attempting to join the labor force. This ultimately leaves a large and important gap in the research surrounding veterans' outcomes, especially as projections show that the population of Latino veterans will double in the next two decades (Livingston 2016). Some evidence demonstrates that Latinos experience increased wages as a result of their military service (Leal et al. 2011), and potentially experience a preference in hiring (Kleykamp 2009), but this topic has more often been a tangential focus of the existing research and remains largely unexplored.

<sup>&</sup>lt;sup>2</sup> Some sources use the terms Hispanic and Latino interchangeably despite standing for two separate concepts capturing measures of race/ethnicity (Mora 2014)

Questions about the outcomes of Latino veterans specifically pose other questions related to other demographic groups, like immigrants. Since the beginning of the Global War on Terror in 2001, over 100,000 veterans—many of them Latinos—have gained citizenship through military service (McIntosh, Sayala, and Gregory 2011). Immigrants have played an important role throughout the history of the United States military, and in addition to being a marker of assimilation (Janowitz 1976), service in the military has also been a way to gain legal rights such as citizenship. Indeed, Section 329 of the Immigrants who enlist during times of armed conflict. Yet, for this group as well, little is known about how military service may aid or hinder civilian job prospects.

Thus, questions remain as to how military service affects perceptions of Latino job candidates, and further, whether military service provides any advantages for immigrants who join the service. This paper has two broad aims: first, this paper seeks to examine differences in job applicant preferences by race/ethnicity, and then see how nativity and military service further interact with race/ethnicity to change such preferences; and second, this paper explores how stereotypes and perceptions of job applicants inform employers' preference. Using novel data collected from a conjoint survey experiment, I find that nativity status matters—native-born Latinos are more likely to be recommended in the hiring process than their foreign-born peers. Second, military service provides an advantage to job seekers, regardless of race/ethnicity and nativity status. This means that although I find that employers typically prefer native-born job candidates over their immigrant peers, immigrant military veterans experience a premium such that they are preferred as job candidates compared to their native-born peers. Mediation analysis suggests that perceptions regarding worker competence and reliability help drive the advantage for

veterans, and that this advantage exists despite negative perceptions that veterans have fewer interpersonal skills.

### Background

### The Importance of Perceptions in Hiring Decisions

Studies using longitudinal and administrative data make clear that heterogeneity exists in labor market outcomes like wages based on race/ethnicity and nativity (Duncan and Trejo 2012; Kreisberg 2021; Stewart and Dixon 2010). This research has shown that Latinos typically earn less than their White peers, and that Latino immigrants face additional penalties in these outcomes. Researchers have sought to understand the reasons for such disparities by focusing on the mechanisms by which these labor market disparities occur. Much of this attention has focused on the initial stages of the hiring process, as it serves as a key point of entry into the labor force. Such research, mainly in the form of field experiments and audit studies, has made incredibly clear that discrimination against various groups exist at the very earliest stages of the job seeking process (Pager 2003; Pager et al. 2009; Pager and Shepherd 2008).

Such discrimination has been classically categorized into two types—statistical discrimination, that is discrimination that is derived from the limited information available to employers to assess competence and productivity (Arrow 2015; Phelps 1972); and taste-based discrimination, which is discrimination largely based on employer preferences (Becker 2010). Research within social psychology has provided a framework to understand the basis for both types of discrimination, focusing on how perceptions form and develop, and how these perceptions can lead to disparate outcomes for various groups. The stereotype content model, in particular, tells us that individuals are evaluated on two primary dimensions—warmth and competence (Fiske et al.

2002). Perceptions on these two dimensions lead to stereotypes and feelings towards specific social groups that lead to individual action, which may be positive or negative (Cuddy, Fiske, and Glick 2008). Racial and ethnic minorities, who are often rated lower on "the big two", face negative stereotypes that consequently result in discrimination in hiring.

Yet, people are multifaceted, and the many aspects of their identities may challenge some of the prevailing stereotypes about certain groups. Unsurprisingly, researchers have sought to understand how the intersection of identities may influence perceptions of job candidates, and whether certain signals or identities may influence perceptions more than others. With respect to the job search process in the labor market, Pedulla (2018) provides a supplemental and useful typology that helps describe how certain identities may interact with one another to create advantages or disadvantages in the labor market. First, Pedulla argues that identities may have an "additive" effect, that is, different identities work independently of one another, such that one identity will affect perceptions uniformly, on average, across the other categories. In the case of group membership of two marginalized identities that hold negative stereotypes, an additive effect would create a "double disadvantage" (Pedulla 2014). Pedulla describes, for instance, the cumulative disadvantage a job applicant who is both black and a woman might experience because of membership in two historically marginalized groups. Alternatively, identities may interact to create "amplified congruence." Within this interaction, two identities may intersect to create a multiplicative effect, such that two identities holding negative stereotypes may have worse consequences and outcomes than these two identities simply added together.

Third, Pedulla (2014) puts forward the idea of "muted congruence." In this case, stereotypes, both of which may be negative or positive, overlap in the information they provide and signal to individuals, and so the redundancy of information may have little effect. Of course,

identities may intersect in a fourth way, which Pedulla (2014) describes as an instance in which an intersection of identities run counter to one another, what he describes as "counter stereotypical information." In this case, identities may work together to mediate the impact of negative stereotypes. Although this may seem obvious in the case of an intersection of a positive and negative stereotype combined, there is some research to show that two negative stereotypes can "mediate" one another and lead to a net positive effect. Pedulla (2014), for instance, illustrates this by finding that although Black men and gay men both have negative perceptions levied towards both groups, gay Black men are more likely to be preferred in the hiring process, as a gay identity provides counter stereotypical information that shifts normative perceptions that Black men are threatening.

It is not entirely clear how military service may affect perceptions towards Latinos, and particularly Latino immigrants. In the following sections, I review the literature on the perceptions of both Latinos and service members more broadly, and specifically perceptions towards both groups in the context of the labor market. I then address how military service may change or influence perceptions towards Latinos and Latino immigrants.

## **Perceptions and Stereotypes of Latino Men**

Much of the literature shows that perceptions towards Latinos in the United States often intertwine perceptions towards Latinos as an ethnic group and perceptions towards immigrants. Latinos, more broadly, are viewed as foreign (Zou and Cheryan 2017), which in turn, is often supplemented by perceptions that Latinos are undocumented and "illegal" (Flores and Schachter 2018), largely due to narratives surrounding "illegal" immigration as a problem attributed to Latinos (Fox and Bloemraad 2015). In research on labor market outcomes, employers, like the American populace at large, often do not disentangle perceptions towards these two identities that is, they treat them as one and the same. Of course, this means that immigrants may not only be denied employment opportunities because they are viewed as not being a good cultural fit in certain workplaces (Almeida et al. 2012), but also because they are presumed to be undocumented (Menjívar 2011).

Despite these broader negative perceptions towards Latinos, and Latino immigrants, several scholars have identified a preference for Latinos in the low-wage labor market, particularly when compared to Black job applicants and employees. Qualitative evidence documents the fact that managers prefer Latino immigrants because employers view them as more manageable and hardworking (Karjanen 2008; Shih 2002; Waldinger 1997). However, the preferences expressed by these employers are often coded, or hidden. While employers make the case that Latino employees ultimately have better "soft skills" than their Black counterparts, Zamudio and Lichter (2008) suggest that these valued attributes are actually indicators of vulnerabilities among the Latino immigrants, are foreign and under resourced—thus implying that Latinos are preferred in low-wage labor markets not because they are genuinely preferred, but because they are perceived as lacking savvy and bargaining power.

Less is known about perceptions towards native-born Latinos, who, of course, are becoming a larger share of the Latino population in the United States. Some research finds that native-born Latinos have higher wages and earnings than their immigrant counterparts, but that they still do worse in these outcomes than their White peers (Stewart and Dixon 2010). One path of inquiry of this study is to explore what differences might exist among perceptions towards native-born and immigrant Latinos seeking entry into the labor force.

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### **Perceptions of Military Service**

The military, according to Pew (2019), continues to be one of the most trusted institutions in the United States. Many researchers have found that military service has a positive effect on outcomes such as wages, particularly for ethnic minorities (Angrist 1990, 1995; Angrist and Krueger 1994; Kleykamp 2013), although this may differ by propensity to enlist (DellaPosta 2013). A number of scholars have outlined why military service may serve as a positive indicator for employers and lead to better outcomes in the labor market. For one, service in the military may signal to employers that an individual has accumulated a large amount of human capital, in the form of tangible skills and education, which in turn, makes them more attractive job candidates (Becker 2009). Some researchers postulate that because of the standards of entry required to serve in the military (MacLean and Elder 2007), military service indicates that the individual has already passed a screening process, and that military service, in turn, demonstrates higher levels of productivity (De Tray 1982).

Yet, perceptions towards veterans are not all positive. Research finds that individuals often overstate their support for the military (Kleykamp, Hipes, and MacLean 2018), and that veterans, particularly those of the Global War on Terror, are perceived as being disruptive, disabled, and suffering from post-traumatic stress syndrome (PTSD) (Stone and Stone 2015). Such perceptions are undoubtedly exacerbated by the fact that fewer Americans serve in the military, and that due to the increased civilian-military divide (Schafer 2017), individuals are left to rely on outside narratives, versus personal experiences, when it comes to forming perceptions towards the military. When it comes to the job application process, then, veterans are viewed as being good "doers" and exceling in jobs that require a lot of agency, but seen as having less empathy, which may funnel veterans into certain occupations (Shepherd et al. 2019). Consequently, veterans may

be typecast and encouraged into jobs like maintenance and construction, and away from jobs in fields like customer service. Still, Maclean and Kleykamp (2014) find that despite carrying the aforementioned stigma of mental health problems, veterans do not necessarily experience discriminatory behavior because of such stigma.

### How Might Military Service Influence Perceptions Towards Latinos?

For many groups, and particularly the most disadvantaged groups in American society, military service has often been thought of as an "equalizer" (Sampson and Laub 1996; Teachman and Tedrow 2007; Xie 1992). In the case of Latinos, there exists some empirical evidence pointing to this fact, showing a wage premium for military veterans, although research in this area has remained limited (Leal et al. 2011). Such positive outcomes have often been attributed to the "bridging" hypothesis, an argument which, at its core, argues that the military serves as an institution that can help "bridge" underprivileged individuals to adulthood. The "bridging" hypothesis posits that military service provides the training, skills, and adjustment to American institutions that allow enlistees to succeed once they leave the service, providing them human and social capital that they may not have received during adolescence (Browning et al. 1973).

Military service may also serve as a mark of integration into American society for those who join. Indeed, military service has been one way for minority groups to increase their perceived belonging and acceptance in American society (Burk 1995). Some argue that service members stand for literal embodiments of American principles and ideals (Ebel 2015), which is why they are given so much praise. For groups like Latinos, who are already considered foreign (Zou and Cheryan 2017), serving in the military may serve to reduce negative connotations that exist towards Latinos as a group and subsequently change perceptions that they are part of the social

periphery in the United States, which in turn, improves their labor market prospects. Thus, a record of military service may provide "counter-stereotypical" information against the stereotypes that potential employers hold towards Latinos, and provide them an upper hand in the hiring process.

Changes in perceptions based on military service are likely to be even more pronounced in the case of Latino immigrants, particularly when such an identity is made explicit. Serving in the military has long been seen as a pathway to citizenship both literally and figuratively. Mazmuder (2019) argues that military service helps integrate immigrants in two ways. First, he provides support for a form of the "bridging" hypothesis—that is, military service, particularly in the case of immigrants, may instill and transfer American social norms and values. Second, he argues that military service encourages integration through close contact and integration with other Americans, ultimately providing them the social capital that may provide an advantage after their service. Wong and Bonaguro (2020) further find that military service among immigrants is the only type of public service which Americans believe is deserving of granting the legal right of citizenship. They argue that this can partially be attributed to the fact that noncitizen immigrant service members choose to defend and contribute to a community in which they hold lower standing and may not inherently benefit from, and that this has become more of the case as fewer Americans choose to serve in the armed forces. Thus, granting citizenship, or entry into the American social core, is an appropriate response of "gratitude" for such service.

A record of military service should benefit immigrants—military service may not only provide legal standing to join the workforce and stand in as a proxy for assimilation, but provide cues about English-language ability and increased cultural fit, factors which have previously served as a basis for discrimination against immigrants more broadly (Hall and Farkas 2008). It is also possible, however, that military service may provide tangible benefits like legal citizenship,

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but not lead to preferences in the labor market. As the qualitative literature makes clear, employers preferences for under resourced workers may actually serve to disadvantage immigrant veterans in the labor market (Zamudio and Lichter 2008), as they may present a risk to employers if they are seen as better resourced and knowledgeable, qualities that have made Black men less preferred in the low-wage labor market (Shih 2002).

#### **Data and Methods**

Data for the experiment was collected from August 20-25, 2021, with the assistance of the survey firm YouGov, a well-respected company often used by researchers to execute survey research, and a firm which maintains a national panel of individuals involved in the hiring process. The survey screened respondents from the panel and allowed them to continue the survey if they met the following requirements: (1) respondents were employed full-time; (2) either served as a manager/supervisor of more than two people or worked in human resources; and (3) were not serving on active duty (i.e. full time) within the U.S. military. As there exists little data on what would constitute a nationally representative sample of hiring authorities, the data does not come from a random probability sample, although every effort was made to recruit a diverse array of respondents. This means that although these results cannot be generalized to the population of retail managers and hiring authorities, the results provide internally valid estimates of the effects of military service and race/ethnicity on hiring outcomes (Pedulla 2016; Quadlin 2018). Furthermore, due to limitations with the panel, not every respondent had direct experience hiring a retail associate, although each respondent had previous experience with hiring overall. A table with the breakdown of the demographic characteristics of respondents can be found in Appendix A. Restrictions on the sample and the screening of potential respondents ultimately led to 372 respondents contributing a total of 3,348 observations or candidate ratings.

### **Experimental Design**

To understand how the intersection of race/ethnicity, immigration status, and military service influence employers' preferences and perceptions of potential job candidates, I conducted a conjoint survey experiment on this sample of hiring authorities. Such experiments, also known as factorial or multidimensional choice experiments, have long been used in fields like marketing (Green and Rao 1971), and have recently regained traction in the social sciences and sociology in particular (Flores and Schachter 2018; Schachter 2016). Within this experiment, respondents were asked to imagine that they were hiring for a full-time retail sales associate position at a large retail chain. Respondents were told that all the candidates left their previous job on good terms with three years of work experience, and then shown a pair of profiles from two potential job candidates simultaneously, a key feature of the design. Under the conjoint design, information about the profiles is provided in a tabular form, allowing researchers to test the impact of specific experimental dimensions without having to manipulate vignettes or resumes in creative ways to make such information explicit.

There were four major experimental manipulations tested within the study, the first of which was race and ethnicity. Within each profile, I explicitly indicated an individual's race/ethnicity within the profile, something that would otherwise have to be relayed through something like a name, a task which can be difficult and may signal other measures, such as socioeconomic status (Gaddis 2017). First names for the job candidates were provided to reduce confusion between two potentially similar profiles and reinforce signals of race/ethnicity and were

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derived from the most popular names given to newborn boys in the 2000s. A second important experimental manipulation was to test the impact of immigration status on employers' perceptions and preferences. To test this premise, a field indicating the place of birth of the candidates was provided to the respondents. Latino job candidates in this study were presented as either being born in the United States or in a Central or South American country. The third experimental manipulation of import was a record of military service, which was presented to the respondent through a field indicating the previous work history of the job candidates. In the case of civilian profiles, applicants were given generic minimum-wage retail positions, while applicants who were veterans displayed their branch of service.

The final, and fourth, experimental manipulation tested the impact of specific military occupational specialties (or job) one held in the military. In the case of applicants who served in the U.S. Army, candidates were said to have served as either an Infantryman—an occupation in combat arms thought to have little transferable skill in the civilian sector—or a Supply Specialist—an occupation that might deal with logistics, administrative tasks, and accountability of equipment. To provide balance to the options provided, another permutation of military service, a U.S. Navy Sailor, was added, as some public opinion research notes differences in favorability for different branches of the military (Gallup 2017). This final manipulation further examines whether veterans with transferable skills are the only ones who may experience a benefit in the labor market. Some previous research has suggested that Black men, for instance, receive higher callbacks for job interviews if they serve in more administrative roles, relative to roles in combat arms (Kleykamp 2009).

There were several other pieces of information provided to the respondents to diversify the profiles and increase the number of permutations available, and further reduce the chances that a

respondent can detect what experimental manipulations are of interest. First, gender was presented to all respondents, but remained fixed as *male* for all profiles. This was not only done for statistical power purposes, but also because military service is still a predominantly gendered occupation, with women making up only 16% of the active duty force (DMDC 2019). Second, the age of the candidate was shown, but was limited to vary between 23 and 25. Finally, educational attainment was presented to respondents, and allowed to vary between an associate's degree, and a form of secondary education (GED or high school diploma). The complete list of attributes shown to respondents is shown below in Table 3.1.

| TABLE 3.1: Profile Attributes and Values |  |  |
|--|--|--|
| Name                                     | <i>White</i><br>Alexander, Cole, Jacob, Luke, Noah   | <i>Latino</i><br>Adrian, Carlos, Daniel, David, Luis,<br>Sebastian                         |
| Gender                                   | Male   |  |
| Age                                      | 23-25  |  |
| Ethnicity                                | White, Latino  |  |
| Place of Birth                           | United States, Mexico, Guatemala, El Sal   | vador, Nicaragua   |
| Education Level                          | High School Diploma, GED, Associate's  | Degree   |
| Previous Occupation                      | <i>Civilian</i><br>Best Buy Sales Associate, Old Navy<br>Sales Associate, Starbucks Barista,<br>Target Sales Associate | <i>Military</i><br>U.S. Army Infantryman, U.S. Army<br>Supply Specialist, U.S. Navy Sailor |

After viewing two of these permutations in tandem, the respondents were then asked to evaluate the two job candidates with the minimal information they had. They were first asked to assess the employability of the candidate — "If you met someone like [David], how likely would you recommend them for an interview based on your initial impression?" This question is in line with previous research in hiring, and allows for some comparability to correspondence audit studies, which usually focus on the first step of the hiring process—the call back for an interview. Finally, the respondents were asked to rate each candidate on several characteristics and personality dimensions, and how likely certain situations might occur with a potential job candidate as an employee. These questions aim to understand the underlying mechanisms that the intersection of race and military status signal, and how employers perceive these job candidates. These traits were specifically chosen because employers have used them to help distinguish between job candidates, and researchers have noted that employers perceive these dimensions differently based on an individual's race or military status (Berger et al. 1972; MacLean and Kleykamp 2014; Stone and Stone 2015).

The survey emphasized that these perceptions were supposed to be based off limited information, and so they more readily capture initial impressions. Although these questions may seem like they would be difficult to answer with the information provided, providing two juxtaposed profiles helps respondents compare one profile to the other. If respondents were unable to differentiate candidates on certain dimensions, we would then see relatively little difference in the perception of certain attributes across candidates, a fact to be explored later in the paper. The order these traits were shown was randomized for each respondent, but remained consistent across the profiles that each respondent saw, in order to reduce cognitive load (Hainmueller et al. 2014). A full list of the attributes asked about are found in Table 3.2. The survey concluded with a series of demographic questions about themselves, to include their age, race/ethnicity, gender, annual income, educational attainment, previous military service, and region of residence. A table with these attributes are provided in the Appendix.

| Question   |  |  |  |
|--|--|--|--|
| <i>How accurately do the following describe <name>?</name></i> | Reliable                                     |  |  |
|  | Ethical                                      |  |  |
|  | Difficult                                    |  |  |
|  | Competent                                    |  |  |
|  | Demanding/Entitled                           |  |  |
|  | Hardworking                                  |  |  |
|  | Independent                                  |  |  |
|  | Combative                                    |  |  |
|  | Has a history of mental illness              |  |  |
| From a scale of 1 (Not at All) to 7 (Extremely), how likely    | Interact with customers in a friendly manner |  |  |
| would <name></name>  | Request to take time off for mental health   |  |  |
|  | Get along with fellow coworkers              |  |  |
|  | Show up to work on time                      |  |  |
|  | Respond well to feedback                     |  |  |
|  | Cause a disruption in the workplace          |  |  |
|  | Have a neat and clean appearance             |  |  |

TABLE 3.2: Characteristics and Actions Job Candidates were Rated On

# Advantages of the Conjoint Design

The conjoint survey design has several advantages compared to previous survey research. First, by showing two profiles simultaneously and providing a point of comparison, respondents are more easily able to make decisions or judgements about the candidates compared to being shown only one vignette or profile at a time (Hainmueller, Hopkins, and Yamamoto 2014). Furthermore, because multiple characteristics can change simultaneously between the two profiles, respondents feel confident that they have numerous reasons for coming to their assessment of a job candidate. This proves to be a key feature of the conjoint design, as there are also often concerns that the results of surveys are subject to social desirability bias. Respondents, believing that their views on a controversial topic like race are being examined, may provide answers that are deemed more socially acceptable or politically correct. Once again, the factorial design proves to be advantageous in this respect since the variation between the two profiles makes it increasingly difficult for the respondent to discern the researcher's topic of interest (Horiuchi, Markovich, and Yamamoto 2018; Schachter 2016). In the case of this study, the number of permutations makes it unclear whether race/ethnicity, previous work history, or educational attainment is the researcher's subject of inquiry, when in fact, it can be all three. Alternatively, it is also possible that a respondent can be shown two profiles that do not vary in every field, such that a respondent might rate two Latino job candidates together. This further reduces the respondent's ability to discern a topic of interest, particularly when the respondent views multiple pairs of profiles. Social desirability bias is further mitigated because the survey is being administered online, which allows respondents more privacy than in-person or telephone surveys.

# **Analytic Strategy**

My analysis proceeds in several ways. First, I examine the effects of candidate's race, nativity, military status on whether a respondent *highly recommends a candidate for an interview*, and the intersection of these three characteristics. I follow previous research and create a binary outcome, where I measure whether a candidate was *highly recommended* (a rating of 6 or 7) or not (rating of 1 to 5), as previous research suggests that these candidates are the ones most likely to receive a callback from employers (Kreisberg 2021; Quadlin 2018). Using the conjoint design, there is relative simplicity in estimating results within the statistical analysis. The main treatment effects (i.e., changes in a single profile attribute) can be thought of as the difference in means between two levels of a treatment (attribute), averaged for all other levels of other attributes (Hainmueller et al. 2014). One is also able, then, to estimate the impact of an interaction of

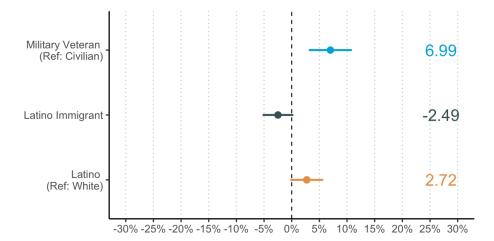
treatment effects (e.g., estimating the difference in preference between Latino immigrants versus native-born Whites). I then examine models where I add in perceptions of applicant traits to determine the extent to which these perceptions mediate the relationship between race, military status, and hiring decisions. This will, in turn, help identify the mechanisms that lead to differences in hiring decisions and allow me to understand how certain identities signal different competencies to employers. I use clustered standard errors to account for the fact that respondents rated multiple profiles.

#### Results

### How do Sociodemographic Profile Characteristics Affect Interview Recommendations?

I first consider how certain candidate's attributes influence the outcome of whether a candidate is highly recommended for an interview by the employer, the results of which are displayed in Figure 3.1 below. This figure has a relatively intuitive interpretation—in the case of categorical variables like race/ethnicity, each coefficient represents the average percentage point difference between the two groups in the probability of being recommended for an interview. The term associated with a Latino identity, then, represents the difference in probability, or in the language of conjoint surveys, the average marginal component effect (AMCE), between native-born Latino and White men in being recommended for an interview.

### FIGURE 3.1: Average Marginal Component Effect of Job Profile Attributes on Being Highly Recommended



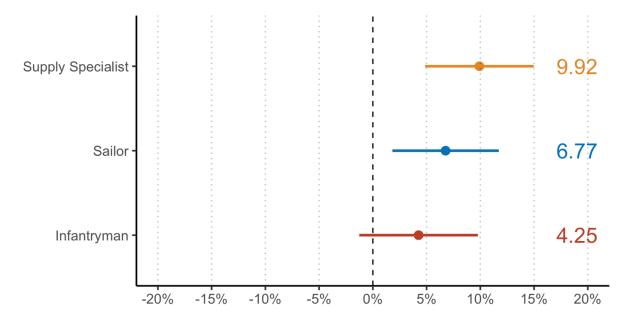
Focusing our attention first on race/ethnicity, I first find an advantage for native-born Latino applicants, such that this group of applicants is on average 3 percentage points more likely to be highly recommended compared to White job applicants. There has been relatively little research examining differences between these two groups, particularly with respect to employer preferences. Some evidence using administrative data has previously suggested that once human capital factors (e.g. educational attainment) are controlled for, Latinos do as well as Whites in terms of labor market outcomes like wages and occupational standing, and that some groups, such as Cuban women, actually outperform their White counterparts in these metrics (Chiswick 1987; Duncan and Trejo 2012). Thus, this finding of a preference for native-born Latinos, albeit marginal, should be of interest, especially as the make-up of the Latino population within the U.S. continues to shift from being a majority immigrant to majority native-born group (Kochhar 2014).

I next attend to how immigration status affects employer's recommendations for an interview. Previous research does not clarify how immigration status may affect employer's perceptions, as some of the literature suggests that immigrants might be advantaged in the hiring process because they are viewed as more manageable and hardworking in the low wage positions,

or that they might be disadvantaged because of views that immigrants do not have the skills and cultural capital to fit these positions. Figure 3.1 provides a better representation of the comparison. Compared to both native-born Latinos and White applicants, immigrants are ~3 percentage points less likely to be highly recommended for an interview. Such a result falls in line with both recent research indicating that immigrant Latinos were 51% less likely to receive callbacks from employers as native-born Latinos (Kreisberg 2021), as well as research showing that immigrants experience penalties in terms of both wages and promotions (Castilla 2008). This difference, of course, is much smaller, which I speculate may be attributed to the context the survey describes in which all candidates had at least completed a secondary education.

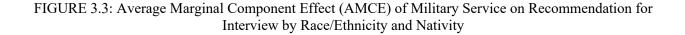
Finally, focusing on the final point of comparison, I find that military veterans are more likely to be recommended for an interview. On average, veterans are 7% more likely to be recommended for an interview compared to non-veterans. Upon further analysis, the veteran premium largely depends on the occupation held by the service member. Figure 3.2 below shows the corresponding estimated percentage point difference in the probability of being highly recommended between individuals with a civilian occupation and specific military occupational specialties. I find that individuals who served in military occupations that provided either transferable skills or technical skills had the largest advantage, such that job applicants who had served as supply specialists were 10 percentage points more likely and sailor seven percentage points more likely, respectively, to be recommended compared to civilian job applicants. However, overall, for those who served in combat arms positions, in this case as infantrymen, see relatively little to no advantage compared to their civilian counterparts. These results lend support to the idea that part of the military advantage comes from the skills and training that the military provides (Kleykamp 2009; Mangum and Ball 1987).

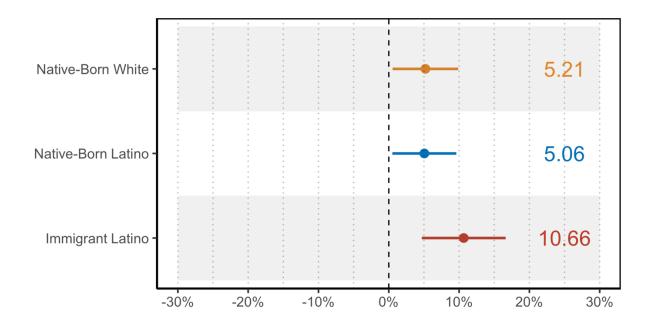
### FIGURE 3.2: Average Marginal Component Effect of Military Occupational Specialty on Being Highly Recommended for an Interview



### How Does Military Service Affect Preference for Latino Job Applicants?

A primary aim of this study is to understand how military service affects hiring outcomes in the labor market for both native-born and Latino immigrants. I find that military veterans experience a premium in the hiring process, but whether heterogeneity in this premium exists remains an outstanding question. Specifically, questions remain as to whether Latinos, who are often viewed as immigrants, may benefit from serving in the military. Military service may serve as a mark of assimilation into American society for both native-born Latinos, who may be viewed as "foreign" by prospective employers, as well as Latinos who actually are immigrants. Figure 3.3 below displays the effect (AMCE) of military service by race/ethnicity as well as nativity status. Figure 3.3 shows that military service gives a similar advantage to both White and native-born Latino job applicants. When it comes to whether a candidate is highly recommended, native-born Latino and White military veterans experience a five-percentage point advantage compared to their respective counterparts with previous retail experience. Immigrant Latino military veterans, though, receive an even greater return, such that immigrant Latino veterans are 11 percentage points more likely to be highly recommended.





Although the AMCEs provide a number of contrasts, they do not provide the context within such results are found, and also mask cross-group comparisons by ethnic group and nativity status. As a result, I also compute the predicted probabilities of being highly recommended for an interview in Figure 3.4, displayed below. First, I continue to find that military service provides an advantage for all groups, regardless of race/ethnicity and nativity status. Of note here is the advantage military service provides to Latino immigrants—point estimates indicate that Latino immigrants who are military veterans are more likely to be recommended than any native-born job candidates without a history of service.

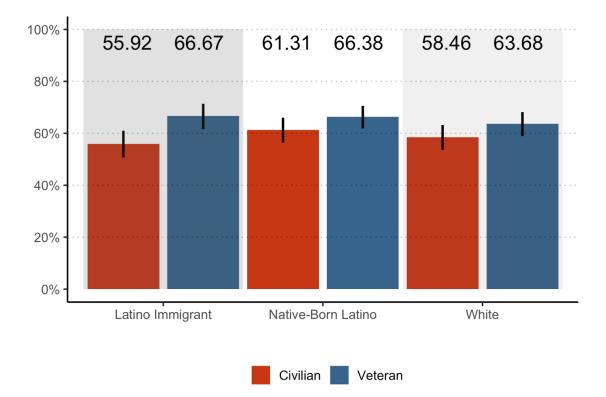


FIGURE 3.4: Probability of Being Highly Recommended by Military Service and Race/Ethnicity

Previously, I found that service members who served in occupations with the most opportunity for skill transfer to the civilian sector were the most likely to gain from their service in recommendations for hiring. However, I now find that this differs for different groups in the analysis. Figure 3.5 below displays the impact of holding certain military occupational specialties on being recommended for an interview by both race/ethnicity and nativity status. For both native-born Latinos and White job applicants, the results are consistent with previous findings— administrative positions provide greater returns than other military occupations (10% versus ~1%). But for Latino immigrants, military service, regardless of occupational specialty, provides a similar advantage. Indeed, Figure 3.5 makes clear that immigrant Latinos experience a 11-percentage point advantage from military service, regardless of whether it comes from combat arms or an administrative position. Such a result suggests that for native-born Americans, the job you hold in

the military matters far more than for immigrant enlistees. In the following section, I examine why such advantages may occur, exploring how perceptions towards specific groups of candidates may influence such preferences.

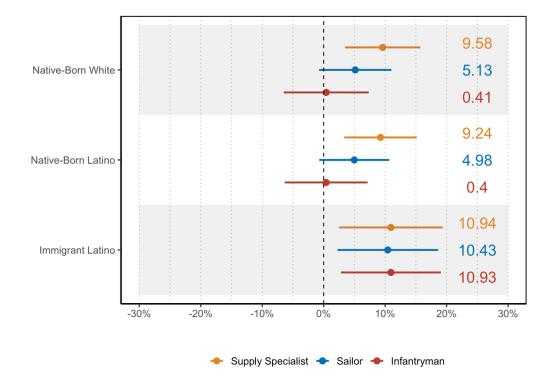


FIGURE 3.5: AMCEs of Military Occupational Specialty on Recommendation for Interview by Race/Ethnicity and Nativity Status

# **Potential Mechanisms Driving Preferences**

Perceptions towards job applicants undoubtedly help influence decisions during the hiring process, from whether someone is hired to what type of wages they will receive as an employee (Pager et al. 2009). This section explores how perceptions of job candidates on several key attributes help to influence the outcomes I observe. Table 3.2 showed the attributes that survey respondents were asked to rate prospective job applicants on. The means of such perceptions are shown in Table 3.3 by ethnicity, nativity, military status. Several key differences emerge between

these groups. Focusing attention on race and ethnicity, results of the survey experiment found that native-born Latinos are preferred to White job applicants. When we analyze perceptions towards native-born Latino job candidates, respondents stated that these job applicants were "less entitled" (p<0.001), more "reliable" (p<0.01) and "hardworking" (p<0.002). Interestingly, there were no differences in how respondents viewed how "difficult" or "demanding" employees in these groups would be.

Latino immigrants, when compared to their native-born Latino peers, were not viewed as any more demanding, entitled, or combative. Such results suggest that the penalty they experience in hiring outcomes are not related to perceptions that immigrants would be more difficult to manage or supervise. Furthermore, contrary to previous research, immigrants were also not found to be viewed as any more or less hardworking than their native-born peers. Employers did, however, find immigrant Latinos to be less competent (p<0.02) and reliable (p<0.07), and less able to interact with individuals in social settings—that is, they are rated lower on perceptions that they will be able to "interact with others in a friendly manner," or "respond well to feedback." Such results confirm previous arguments that perceptions or stereotypes that immigrants may have issues with communication or cultural fit may help drive labor market outcomes (Almeida et al. 2012).

|  | White       |  | Native-Born Latino |             | Immigrant Latino |             |
|--|-------------|--|--------------------|-------------|------------------|-------------|
|  | Civilian    | Civilian Military Civilian Military Civilian |                    | Military    |                  |             |
|  | N=569       | N=547  | N=529              | N=587       | N=549            | N=567       |
| Attribute                                    |             |  |                    |             |                  |             |
| Reliable                                     | 4.91 (1.31) | 5.45 (1.29)                                  | 4.98 (1.32)        | 5.62 (1.20) | 4.93 (1.28)      | 5.50 (1.28) |
| Ethical                                      | 4.58 (1.54) | 4.93 (1.53)                                  | 4.66 (1.50)        | 5.08 (1.55) | 4.58 (1.51)      | 4.95 (1.61) |
| Difficult                                    | 1.96 (1.34) | 1.89 (1.28)                                  | 1.77 (1.18)        | 1.91 (1.35) | 1.90 (1.29)      | 1.83 (1.27) |
| Competent                                    | 4.95 (1.36) | 5.28 (1.29)                                  | 5.03 (1.33)        | 5.41 (1.25) | 4.96 (1.31)      | 5.24 (1.40) |
| Demanding                                    | 2.13 (1.44) | 2.10 (1.44)                                  | 2.01 (1.37)        | 2.10 (1.44) | 2.11 (1.45)      | 2.04 (1.42) |
| Entitled                                     | 2.28 (1.58) | 2.18 (1.59)                                  | 2.00 (1.39)        | 2.04 (1.45) | 2.11 (1.49)      | 1.95 (1.42) |
| Hardworking                                  | 4.84 (1.38) | 5.39 (1.33)                                  | 4.98 (1.30)        | 5.56 (1.26) | 5.04 (1.32)      | 5.45 (1.35) |
| Independent                                  | 4.31 (1.61) | 4.68 (1.59)                                  | 4.41 (1.56)        | 4.78 (1.65) | 4.35 (1.61)      | 4.69 (1.65) |
| Combative                                    | 1.95 (1.37) | 2.05 (1.42)                                  | 1.83 (1.26)        | 1.98 (1.41) | 1.92 (1.34)      | 1.98 (1.36) |
| Has a history of mental illness              | 1.67 (1.29) | 1.67 (1.23)                                  | 1.56 (1.10)        | 1.71 (1.29) | 1.65 (1.16)      | 1.67 (1.25) |
| Action Likelihood                            |             |  |                    |             |                  |             |
| Interact with customers in a friendly manner | 5.48 (1.06) | 5.31 (1.04)                                  | 5.50 (1.05)        | 5.48 (1.08) | 5.48 (1.03)      | 5.37 (1.14) |
| Requests to take time off for mental health  | 2.25 (1.48) | 2.17 (1.45)                                  | 2.05 (1.44)        | 2.22 (1.47) | 2.16 (1.45)      | 2.20 (1.47) |
| Get along with fellow coworkers              | 5.29 (1.09) | 5.35 (1.04)                                  | 5.32 (1.05)        | 5.48 (1.06) | 5.24 (1.06)      | 5.38 (1.14) |
| Show up to work on time                      | 5.26 (1.10) | 5.76 (1.05)                                  | 5.33 (1.08)        | 5.92 (1.02) | 5.33 (1.06)      | 5.81 (1.14) |
| Respond well to feedback                     | 5.05 (1.16) | 5.32 (1.07)                                  | 5.14 (1.13)        | 5.45 (1.11) | 5.08 (1.10)      | 5.36 (1.20) |
| Cause a disruption in the workplace          | 2.12 (1.30) | 2.09 (1.32)                                  | 2.01 (1.27)        | 2.08 (1.36) | 2.14 (1.31)      | 2.07 (1.38) |
| Have a neat and clean appearance             | 5.32 (1.09) | 5.72 (1.02)                                  | 5.32 (1.07)        | 5.89 (0.97) | 5.28 (1.06)      | 5.73 (1.11) |

TABLE 3.3: Descriptive Statistics of Employer Perceptions by Race/Ethnicity and Military Status

Note: Standard Errors in Parentheses

Finally, I find that veterans are viewed as possessing several positive attributes relative to their non-veteran peers, such as "showing up to work on time" as well as being "competent" and "reliable" employees. Yet, as previous research has indicated, veterans were also perceived to have several negative attributes. Indeed, veterans were thought to be more "combative" (p<0.04), and have difficulties in interactions with others, perceptions like those held towards immigrants. Yet, because veterans see such a large advantage in hiring preferences among employers, these negative perceptions may not convert to disadvantages in labor market outcomes, as previous work by Maclean and Kleykamp (2014) suggests. Surprisingly, these descriptive statistics do not indicate that employers believe military veterans are more likely to suffer from a mental illness or PTSD, a departure from existing research on perceptions towards veterans.

To examine these differences further, I conduct a mediation analysis to understand how such perceptions help influence employer preferences. Because respondents rated candidates on a wide array of traits, I condense these traits into several factors using exploratory factor analysis (EFA). EFA is a common method used by social scientists to create parsimony by reducing the number of dimensions and combining correlated attributes. The analysis, using orthogonal varimax rotation<sup>3</sup>, resulted in three factors explaining  $\sim$ 70% of the variance. The three factors, shown in Table 3.4 below, deal with perceptions surrounding competence  $(\alpha=0.92)^4$ , beliefs surrounding applicants being difficult to manage ( $\alpha$ =0.91), and perceived skills in social interaction ( $\alpha$ =0.91). The models in this analysis use factor scores derived using the Bartlett method (Bartlett 1937), which provides unbiased estimates of the true factor scores (Hershberger 2005).

| Factor                                      | and Items Used to Assess Perceptions Towards Job Applicants Items   |
|---|---|
| Worker Competence<br>(α=0.92)               | <ul> <li>Reliable</li> <li>Ethical</li> <li>Competent</li> <li>Hardworking</li> <li>Independent</li> <li>Show up to work on time</li> </ul>           |
| Difficulty in Supervision<br>(α=0.91)       | <ul> <li>Have a neat and orderly appearance</li> <li>Difficult</li> <li>Demanding</li> <li>Entitled</li> <li>Combative</li> <li>Disruptive</li> </ul> |
| Social Interaction Skills ( $\alpha$ =0.91) | <ul> <li>Interact with customers in a friendly manner</li> <li>Get along with fellow coworkers</li> <li>Respond well to feedback</li> </ul>           |

TABLE 3.4: Factors and Items Used to Assess Percentions Towards Job Applicants

Table 3.5 below shows the results of a logistic regression model where the outcome is whether an applicant was highly recommended for an interview, the same outcome as the previous

<sup>&</sup>lt;sup>3</sup> There are several possible ways to conduct exploratory factor analysis. Varimax rotation is an orthogonal rotation method used that creates factors that minimizes the number of variables that have high loadings on each factor, providing us with interpretable factors that are uncorrelated with one another.

<sup>&</sup>lt;sup>4</sup> The Cronbach's alpha ( $\alpha$ ) is displayed here and is a measure of internal consistency that shows how closely items within the set are related to one another. These values range from 0 to 1, and the higher the alpha value, the higher the measure of internal consistency.

analysis, but now adds terms surrounding perceptions towards candidates. Model 1 displays a baseline logistic regression model with the three experimental manipulations of interest. Model 2 of Table 3.5 adds in a term representing the factor related to social interaction skills. I find three important results once we control for social interaction skills: (1) the odds of recommending an immigrant job applicant increases, such that immigrants are just as likely to be highly recommended as native-born applicants; (2) native-born Latino job applicants are no more likely to be recommended than White job applicants; and (3) the probability of being recommended for an interview for military veteran applicants increases. Such results suggest the penalty I find for immigrant job applicants is driven by perceptions that immigrants may have issues interacting with both customers as well as their coworkers and managers. Similar concerns may exist with White job applicants. These results also suggest that employers' concerns about veterans' ability to interact well with others penalizes them in the hiring process, although employers seem to believe that the benefits surrounding hiring veterans continue to outweigh such negative perceptions.

Model 3 further adds a term controlling for perceptions that a job applicant would be difficult to manage. We find that once we account for such perceptions, the advantage for military veteran job applicants actually increases, insinuating that although employers view veterans as reliable, there is some concern that managing veterans may pose some challenges. Finally, once we account for factors related to competence in the analysis, the results of which are displayed in Model 4, we see that the advantage provided to military veterans also disappears. Consequently, much of the advantage provided to veterans comes from employers' perceptions that military veteran job applicants are skilled and able workers.

|  | 1                     |                                  |                       |                       |
|--|-----------------------|----------------------------------|-----------------------|-----------------------|
|  | Highly Rec            | Highly Recommended for Interview |                       |                       |
|  | (1)                   | (2)                              | (3)                   | (4)                   |
| Latino   | 0.116*                | 0.109                            | 0.099                 | 0.012                 |
|  | -0.065                | -0.069                           | -0.069                | -0.079                |
| Immigrant  | -0.106*               | -0.075                           | -0.073                | -0.039                |
|  | -0.06                 | -0.065                           | -0.065                | -0.074                |
| Military Veteran                                       | 0.299***              | 0.366***                         | 0.371***              | -0.06                 |
| (Ref: Civilian Occupation)                             | -0.086                | -0.09                            | -0.09                 | -0.106                |
| Candidate Perceptions                                  |                       |                                  |                       |                       |
| Social Interaction Skills                              |                       | 0.514***                         | 0.521***              | 0.700***              |
|  |                       | -0.071                           | -0.07                 | -0.087                |
| Difficulty in Supervision                              |                       |                                  | -0.160**              | -0.201***             |
|  |                       |                                  | -0.071                | -0.071                |
| Worker Competence                                      |                       |                                  |                       | 1.032***              |
|  |                       |                                  |                       | -0.112                |
| Constant   | 0.304***              | 0.303***                         | 0.309***              | 0.674***              |
|  | -0.096                | -0.098                           | -0.099                | -0.11                 |
| Observations   | 2.249                 | 2.249                            | 2.249                 | 2.249                 |
| Log Likelihood   | 3,348                 | 3,348                            | 3,348                 | 3,348                 |
| Akaike Inf. Crit.                                      | -2,211.21<br>4,430.42 | -2,100.07<br>4,210.15            | -2,089.97<br>4,191.93 | -1,778.74<br>3,571.47 |
|  | 1,120.12              | .,210.13                         | 1,121120              | 5,571117              |
| Note: Robust standard errors shown below coefficients. | s                     | *p<0.1 **p<0.0                   | 05 ***p<0.01          |                       |
| ociow coefficientis.                                   |                       |                                  |                       |                       |

# TABLE 3.5: Effects of Candidate Perceptions and Applicant Characteristics on Hiring Outcomes

Dependent variable:

# **Discussion and Conclusion**

As both the demographic makeup of the United States changes, and the Global War on Terror draws to an end, outstanding questions remain as to how minority groups, like Latinos and military veterans, fare when seeking employment in the low-wage labor market. This study used a survey experiment to explore these unanswered questions, specifically examining how military service affects perceptions and labor market outcomes for the population of Latino veterans, and how such outcomes might differ by nativity status. Overall, I find that military service provides a premium in the job application process, regardless of other applicant characteristics and demographics. Why do veterans experience a premium in the hiring process? Mediation analyses suggest that military service sends strong signals with respect to worker competence and reliability. Although employers also view veterans as struggling in situations involving soft skills—a result found in other studies (Shepherd et al. 2019; Stone and Stone 2015)—positive views surrounding veterans' competence ultimately outweigh these negative perceptions.

This study also finds that differences in hiring preferences exist between native-born and immigrant job applicants. Previous studies have outlined the potential for both advantages and disadvantages for Latino immigrants. Some studies suggest that employers, often convoluting an immigrant identity with undocumented status among Latinos, prefer these workers because they are easier to manage (Shih 2002; Waldinger 1997; Zou and Cheryan 2017). On the other hand, evidence has previously suggested that immigrants are disadvantaged because they are seen as failing to abide by cultural norms in the workplace (Almeida et al. 2012). Results from this study lend support for the latter, finding that employers hold negative perceptions towards Latino immigrant job applicants applying for low-wage retail positions. However, I also find that a history of military service compensates for this disadvantage, such that immigrant veterans are preferred to their native-born counterparts. This advantage does not depend on the type of job an immigrant served in while in the military, unlike their native-born counterparts. Whereas advantages for military veterans are limited to those who served in administrative or clerical positions among native-born Latinos and Whites, all Latino immigrants who are military veterans receive an equal

advantage. Military service is one of the few forms of public service that Americans believe is deserving of citizenship, as immigrants in the military are volunteering to potentially sacrifice their lives to protect a group to which they do not necessarily belong (Wong and Bonaguro 2020). This may help explain why service in combat arms, a position that would be the first to fight on the front lines, is advantageous for immigrants even if it is not for other demographic groups.

The results also suggest that native-born Latino job applicants are preferred relative to their White peers, an unexpected but notable finding. Within this study, I find that native-born Latino male job applicants are ~3% more likely to be recommended for an interview than their White peers. Military service only serves to amplify this advantage. I find that the advantage native-born Latinos experience exists because White job applicants are viewed as more entitled and difficult to manage. However, nativity status was a fact explicitly mentioned within candidate profiles, and this piece of information is most likely latent in the real job application process. Employers may occasionally be able to determine nativity from questions on applications regarding authorization to work within the U.S. (which asks whether an applicant is a citizen of the U.S., or has a green card or visa), but such a question does not capture applicants who were born outside of the country and later gained American citizenship. Thus, although native-born Latinos may be preferred in a theoretical sense, employers may nevertheless view and treat native-born Latinos as foreign, and thus still discriminate against this group. Structurally, though, the heterogeneity that exists by nativity status emphasizes the need for specificity among researchers who examine outcomes of Latinos, as previous work in this field has failed to explicitly differentiate nativity status and ethnicity (Kreisberg 2021). This is especially true as the native-born population of Latinos continues to grow within the United States.

There are several key caveats to this study that should be addressed. First, I would be remiss to not emphasize the timing of the study, which occurred during the withdrawal of troops from Afghanistan in the summer of 2021. This likely placed the military on the forefront of respondents' minds more so than if the survey was administered during another period. The simultaneous timing of the fielding of the survey and the withdrawal was unplanned but may have had an impact on respondents' perceptions and choices. Another important caveat to these findings is that the study was based on hiring for a minimum wage retail position. The advantages and disadvantages that we see may only pertain to minimum wage jobs, positions which employers view as having a unique set of requirements. Consequently, future research should attend to whether the premiums experienced by various demographic groups found in this study persist in other sectors of business and hiring. Some recent research from Kreisberg (2021) has demonstrated that native-born Latinos with college degrees experience an advantage in hiring for white-collar positions compared to Latino immigrants with the same level of educational attainment, but the study does not address differences in perceptions between White and native-born Latino job candidates. Thus, it remains to be seen whether native-born Latinos also experience better perceptions and outcomes compared to their White peers in other contexts, such as more white-collar professions or other industries.

This study ultimately provides insight into how military service currently affects perceptions of job candidates, and how returns may differ for both native-born and immigrant Latinos. As the U.S. continues to change demographically, it is important to focus on the outcomes of Latinos, and how assimilating institutions like military service may affect outcomes over the life course. This paper not only extends and confirms previous work that highlights the challenges that immigrants face when applying for jobs, but also highlights new evidence demonstrating an advantage and preference for native-born Latinos in comparison to their White peers. Within the United States, a history of military service proves to be advantageous for all groups, but for Latino immigrants especially, military service is a mark of assimilation and integration that lead to advantages in the labor market.

|  | Sample<br>Percent/Mean |
|--|------------------------|
| Gender:  | reicent/wiean          |
| Male   | 63.20%                 |
| Female   | 36.30%                 |
|  | 0.54%                  |
| Other (Transgender/Non-binary/Two-Spirited)                                  |                        |
| Age<br>Deco/Ethnicity  | 55.8 (10.6)            |
| Race/Ethnicity:<br>White   | 91.10%                 |
|  |                        |
| Black  | 1.34%                  |
| Hispanic   | 1.61%                  |
| Asian  | 3.23%                  |
| Middle Eastern   | 0.27%                  |
| Native American  | 1.08%                  |
| Other Identity   | 1.34%                  |
| Born in the US   | 94.00%                 |
| Education:   |                        |
| High school graduate   | 2.96%                  |
| Some college   | 9.68%                  |
| 2-year   | 6.72%                  |
| 4-year   | 36.60%                 |
| Post-grad  | 44.10%                 |
| Region:  |                        |
| Northeast  | 18.8%                  |
| Midwest  | 19.9%                  |
| South  | 33.90%                 |
| West   | 27.40%                 |
| Number of people working for you   | 19.8 (54.3)            |
| Industry of Employer   |                        |
| Agriculture, Forestry, Fishing and Hunting                                   | 0.81%                  |
| Mining, Oil and Gas Extraction, and Utilities                                | 0.54%                  |
| Construction   | 4.03%                  |
| Manufacturing  | 7.53%                  |
| Wholesale Trade  | 1.34%                  |
| Retail Trade   | 6.45%                  |
| Transportation and Warehousing   | 1.88%                  |
| Media, Communications, and Digital Entertainment                             | 1.08%                  |
| Finance, Accounting, and Consulting  | 7.53%                  |
| Insurance  | 2.96%                  |
| Real Estate, Rental, and Leasing   | 2.69%                  |
| Personal Care and Services   | 1.61%                  |
| Research   | 0.54%                  |
| Engineering, Computer-Related Design, and Architecture                       | 5.91%                  |
|  | 5.38%                  |
| Law and Legal Services<br>Education  |                        |
| Education<br>Health Care and Social Assistance                               | 16.40%<br>8.06%        |
|  | 8.06%                  |
| Arts, Entertainment, and Recreation  | 1.34%                  |
| Restaurant, Travel and Lodging   | 1.34%                  |
| Non-profit, Community, Religious and Social Service Organizations            | 5.91%                  |
| Maintenance and Repair Services  | 0.81%                  |
| Government   | 5.11%                  |
| Other<br>Note: Standard Errors shown in parentheses for continuous variables | 10.75%                 |

# Appendix to Chapter 3 TABLE A-1: Descriptive Statistics of Respondent Managers (N=372)

Note: Standard Errors shown in parentheses for continuous variables

# Chapter 4: The Black-White Remarriage Gap—Evidence for a Reversal in the Military Context

Researchers have long noted a persistent gap in marriage and divorce rates between White and Black people within the United States. Black individuals, on average, are less likely to marry and more likely to divorce (Raley, Sweeney, and Wondra 2015). This gap also extends to the context of remarriage — Black individuals, and Black women especially, are less likely to remarry than their White peers (Bumpass et al. 1990; McNamee and Raley 2011). Statistics from the 2012 American Community Survey indicate that 60% of previously married White Americans remarry, whereas only 48% of Black Americans remarry (Livingston 2014; Wilson and Clarke 1992). Although there is some evidence to suggest this gap is decreasing in recent periods (Payne 2018), attending to differences in remarriage patterns is important because of the benefits that remarriage can provide following a separation or divorce. Undoubtedly, divorce serves as a disruptive event in an individual's life, and can affect a person's economic and personal well-being, especially for women who are mothers (Raley and Sweeney 2020; Smock, Manning, and Gupta 1999; Tach and Eads 2015). Remarriage can serve as an opportunity to re-establish economic security, and potentially improve personal health and well-being (Amato 2000; Smock 1990). Consequently, differences in patterns of remarriage may point to inequalities in the accrual of such benefits.

Several theories have been put forward by scholars to understand and explain the gap in remarriage patterns. Social demographers most often have pointed to compositional differences in factors like socioeconomic status between the two demographic groups as the culprit for the difference, yet net of these social background characteristics and measures, a residual difference between Whites and Blacks remains with respect to all marital transitions. (McNamee and Raley 2011; Tzeng and Mare 1995). Some scholars have suggested, alternatively, that the difference in patterns in martial transitions are reflective of normative or cultural differences that exist between

White and Black individuals (Billingsley 1992; Moynihan 1965). These cultural claims are difficult to operationalize and test empirically.

Another group of researchers have turned to the United States military context in an attempt to explore and rebut such arguments. These researchers note that standard measures of socioeconomic and occupational status may not account for factors like racial discrimination that Black Americans face in the labor market (Lundquist 2004, 2006; Teachman and Tedrow 2008). Consequently, the military, which serves as an institution which provides relatively equal access and resources to all its service members, serves as a site to assess whether differences in marital transitions remain in a relatively equal socioeconomic context. With respect to marriage and divorce, scholars have found that even after controlling for selection into the military, the gap in marital transitions between Blacks and Whites disappears, or even reverses. These results suggest that differences in marriage and divorce are not driven by differences in culture or preferences as previous scholars hypothesized.

This paper builds on this previous body of research, using the military as a context to explore differences in patterns of remarriage between Black and White Americans. Using the National Longitudinal Survey of Youth 1979, I find that the difference in remarriage risk between Black and White men not only disappears, but reverses in the military context. Black military men are more likely to remarry than White military men. The results suggest that socioeconomic differences, as well as structural factors like discrimination, help explain differences in remarriage rates.

#### Background

### **Explanations for Differences in Remarriage Patterns**

Although researchers have empirically explored differences in remarriage rates by race and ethnicity (Bumpass et al. 1990; McNamee and Raley 2011), few theories specifically deal with race and ethnic differences in remarriage patterns. Instead, most theories surrounding differences in rates of marital transitions focus on first marriage. One common explanation for such differences pertains to the difference in average socioeconomic status between White and Black people. As Oppenheimer (1988) notes in her seminal piece on marital search theory, individuals delay marriage when there is a high degree of economic uncertainty about a partner, especially with respect to a potential spouse's socioeconomic prospects. Inequality and longstanding discrimination within the United States have generated greater rates of job instability and lower wages for Black Americans (Kirschenman and Neckerman 1991; Neckerman and Kirschenman 1991; Waldinger 1997). Thus, using the framework of marital search theory, the lower average socioeconomic status of Black individuals can help account for differences in marriage patterns. Qualitative research, too, has highlighted the socioeconomic argument. Edin (2000) notes that economic uncertainty helps explain delays in marriage, particularly for Black women of lower socioeconomic status. Women delay or avoid marriage altogether because of fears of entering precarious unions with partners who may be financially unstable. Her work underscores the fact that it is not simply about earnings, but the regularity and the source of earnings that impact the decision to marry.<sup>5</sup>

Explanations for differences in marriage rates have implications for differences in remarriage rates. Remarriage is an event that is related to, but distinct, from first marriage.

<sup>&</sup>lt;sup>5</sup> Edin points out various other reasons, such as concerns about trustworthiness and financial independence, that also play an important role in the decision to marry.

Individuals eligible to remarry may leave their previous marriages with children, the experience of a divorce and failed marriage, and are often older and potentially more set in their career paths (Bumpass et al. 1990). Socioeconomic status, then, may be of even greater importance for remarriage. Sweeney (1997) notes that remarriage is strongly linked to socioeconomic factors since divorce generally occurs at older ages when individuals are in more stable job trajectories, and there is potentially more information with regards to economic prospects. With respect to first marriages, individuals may be somewhat uncertain as to how levels of educational attainment or earnings offer an indicator of future earnings. However, when individuals seek partners in the context of remarriage, individuals are able to better discern a potential partner's socioeconomic status, which in turn, may signal a particular lifestyle and relationship (Shafer and James 2013). Yet, in demographic analyses of remarriage patterns, net of characteristics like educational attainment and income, researchers have continued to find a residual gap in remarriage rates between Black and White people (McNamee and Raley 2011).

The persistence of such a gap in previous analyses has allowed other scholars to propose alternative theories that might explain the Black-White gap in marital transitions. First, some researchers have argued that an imbalanced gender ratio between Black men and women have caused a "marriage squeeze" in which there are not enough men available as potential partners (Schoen 1983; Spanier and Glick 1980). This is only exacerbated by the increased likelihood of Black men to be incarcerated, particularly at younger ages (Staples 1985). Other research suggests that the decreased marriage rates for Black Americans can be attributed to cultural norms and patterns of behavior (Billingsley 1992; Schoen and Kluegel 1988). This line of reasoning posits that family behavior patterns are related to longstanding cultural responses to slavery (DuBois 1996; Patterson 1999). Such responses include reliance on extended kinship networks (Cross 2018)

and the increased independence of Black women within the family (Stack 1997). Scholars hypothesize that these responses reduce the desire or need for unions or partnerships, but some have been difficult to operationalize in quantitative work.

### Using the Military as a Context to Study Marital Transitions

Researchers have found that previous explanations, both economic and cultural, may not fully account for factors like structural discrimination that Black individuals face within U.S. society (Lundquist 2004, 2006; Teachman and Tedrow 2008). Indeed, Lundquist (2006) argues that traditional measures of socioeconomic status, such as educational attainment or wages, "inadequately capture direct and spillover effects of being black in a white society" (422). Recent field experiments show that even highly educated Black men receive fewer employment call-backs than their White peers with less prestigious degrees (Gaddis 2015). Such studies suggest a reality in which high educational attainment, in and of itself, may not necessarily indicate strong socioeconomic prospects or stability because of the structural barriers like discrimination that Black men face within the U.S. labor market. In turn, under marital search theory, this lack of confidence in future socioeconomic prospects may delay or hinder marriage for Black individuals, and subsequently account for differences in remarriage patterns between the two ethnic groups.

However, factors like structural discrimination are difficult to operationalize in statistical analyses. As a result, some researchers turn to the U.S. military to explore how marital transitions occur within a context that provides relatively equal access to resources for all of its service members (Lundquist 2006). Serving as an alternative to the wider U.S. society, the military is a microcosm of the U.S. in which researchers can explore phenomena found within society at large. It is an especially useful context for exploring differences between Black and White men and

testing theories regarding discrimination and socioeconomic status because of the unique structure and place the military holds as an institution. Indeed, the military, as an early adopter of integration, has been a place in which Black Americans are able to attain middle-class status, particularly as the military transitioned from the draft to an all-volunteer force (Moskos and Butler 1996). Although the overall pay within the military may be less than that found in the civilian sector, there is relative equity found within the armed forces between White and Black service members not found elsewhere in civilian society. There is a standardized wage system, accompanied by a centralized and regular system of promotions. While serving, Black service members claim higher job satisfaction than their White peers—a pattern not found in the civilian sector (Lundquist 2008). Thus, the military serves as a unique socioeconomic site of a relatively more equal microcosm of U.S. society for social scientific research. To be clear, this is not to say that the military is an organization free of discrimination. Black service members, relative to their White peers, still contend that discrimination exists based on race and ethnicity (Moore and Webb 1998, 2000). However, relative to the civilian context at large, there are fewer structural barriers than that experienced in the civilian population. (Teachman, 2009).

Using the military as a site of inquiry, researchers have described several patterns about marital transitions. Lundquist (2004) and Teachman (2007) find that the difference in marriage rates between Black and White people characteristic of U.S. society disappear within the military context: Black and White service members have an equally high likelihood of marrying. In the context of marital dissolution, the patterns found in the civilian population reverse—that is, Black service members actually experience greater marital stability, and subsequently lower divorce rates, than White service members; such findings stand even accounting factors of selection into the military (Lundquist 2006; Teachman and Tedrow 2008). These findings suggest a reality in

which Black service members "are afforded the social and economic resources to achieve their desires for marriage" (Teachman and Tedrow 2008).

The military, nevertheless, poses challenges to family demography research, particularly with regard to marital transitions. To be sure, the military is an institution that promotes a culture of marriage. As a "greedy institution", the military demands of its members long hours at work away from home, further increasing the potential need for another caretaker in the household, especially for parents (Segal 1986). The demands of work are accompanied by the unknown nature of the military-the threat of geographic relocation and overseas deployments often serve to expedite the process in which service members enter formal unions, often before a marriage would occur in the civilian context (Lundquist and Xu 2014). Indeed, Lundquist and Xu find that the military's nomadic lifestyle and the guarantee of relocation often serves as a "turning point" in the relationships of many couples-they often must choose between formalizing their relationship to accommodate the couple in the relocation process, or risk separating completely with no guarantee that the service member will return. Furthermore, as service members progress into higher ranks, research has noted that spouses are a necessary part of progression within the military. Historically, spouses have been sought to perform certain duties, such as leading family support groups, and that performance in such roles is an unspoken feature of the evaluations that service members undergo (Harrell 2001).

Such a culture is accompanied by tangible benefits that the military provides married service members. Married service members are eligible for supplemental income for housing and increased allowances for food (Lundquist 2006). Some scholars have pointed to the increased economic incentives as one of the reasons service members marry early and more often (Hogan and Furst Seifert 2010). However, in the case of remarriage, the incentives to remarry are not

necessarily as large as with first marriage. Service members who divorce and have children, for instance, receive the same benefits as if they were married, reducing any explicit economic incentives to marry among divorcees who are parents. Interestingly, research has also shown that single parents in the military are no more likely to report increased stress in the family than their married peers (Orthner and Bowen 1982). The availability of family support programs provided to service members may subsequently change the way that the presence of children affects remarriage (Rostker and Yeh 2006). With respect to divorce, then, the military potentially mediates the negative effects—particularly those of a financial nature—of a divorce, reducing the structural incentives to remarry.

Yet such incentives should not impede the present analysis. Indeed, a key argument of this paper is that the potential benefits to marriage are available to all service members, regardless of race or ethnicity, and that due to equity in opportunity, Black service members are more readily able to take advantage of opportunities for remarriage than their civilian counterparts. If the difference in remarriage patterns disappears within the military context after accounting for socioeconomic factors (in line with previous research), such findings might suggest that Black men, if provided more equal economic opportunities and resources within broader American society, would remarry at similar rates to those of White men.

# **Data And Methods**

This study uses data from the National Longitudinal Survey of Youth 1979 (NLSY79), which follows a cohort of individuals aged 14-19 annually until 1994, and then biannually until the present day. The NLSY79 remains an important resource in using military service as a site of comparison to broader society because it is one of the only nationally representative surveys that

includes both a subsample of military personnel as well as data on their social background characteristics. Of the 12,686 respondents of the survey, 1,280 respondents were military service members on active duty during the first round of the survey in 1979. Funding for this military subsample was eventually lost in 1985, and so a portion of the original military sample is lost to attrition, but an additional 1,653 respondents enlist in the armed forces throughout the course of the survey.

The analytic sample is limited to both civilian and military male respondents who experienced a separation or divorce from their first marital partner between the years 1979 to 1993. Although more waves of survey data from the NLSY79 are available, 1993 is the last year that a researcher can easily identify individuals who served on active duty within the military. After that point, the distinction between individuals on active duty, and individuals in the reserves, becomes convoluted. Such a distinction is important because service in the reserves on a part-time basis does not provide the same benefits and resources as those provided to individuals who serve fulltime on active duty. Because a major contention of this paper's argument is that the military is an environment that provides relatively equal access to resources and opportunities, it is important to differentiate those who gain from such an environment to avoid spurious results. The implication of this time restriction is that the analysis focuses on remarriage within the context of early adulthood for the NLSY79 cohort. I further restrict the analysis to men due to the limited data available on women in the military. Consequently, the analytic sample consists of 1,197 men, of whom 105 served on active duty in the military at the time of separation from their first marital partner.

### Measures

*Outcome Variable*. The event of interest in this analysis is the time to remarriage, and more specifically, the time to second marriage. Some authors have used unions of any kind as an outcome to understand family formations. In the context of military service, however, cohabitation is not always possible due to constraints on service members that dictate where they are able to live. Furthermore, remarriage has different motivations and benefits than does cohabitation (Shafer and James 2013; Waite and Gallagher 2001). As a result, I exclude cohabitation as an outcome for this analysis. The risk of remarriage begins, then, once the first marriage has ended, measured from the point of separation, in line with previous studies on remarriage (Sweeney 1997). If the respondent did not experience separation, then the risk of remarriage is measured from time of divorce. Time, then, begins at  $t_0$  which represents the time at which the first marriage dissolves, and continues until  $t_n$ , which represents the time at which a respondent experiences remarriage or is censored due to attrition from the survey or end of the observation period. Because most subsequent transitions happen soon after marital dissolution, I limit the length of time observed to five years after separation in line with previous research (Bumpass and Sweet 1989).

*Independent Variables.* Some studies have used time-varying measures to account for changes that occur throughout the life course; however, concerns with endogeneity exist. For instance, individuals might change their labor force participation behavior with the expectation that remarriage is likely. To prevent this issue, all independent variables in this analysis are time-invariant, such that the values are measured at the time of marital dissolution.

*Military Service.* A primary motivation of this study is to understand how remarriage patterns might differ within the military context. However, there are several ways that individuals may serve in the military, and it is important to distinguish between respondents who serve on

active duty and those who serve in the reserves. Theoretically, the motivation and way individuals choose to join the various segments of the military are very different. As previously noted, reservists do not receive the same degree of benefits as those who serve full-time. Because this paper contends that the military environment provides equity in wages and resources, it becomes important to define these types of service in two ways within the sample. First, active duty service—the focal point of this analysis—is defined to include respondents who serve in the military full-time as an enlisted service member or officer in one of the branches of the armed forces at the time of marital separation. Second, service in the reserves is defined as individuals who serve in the reserves or National Guard at the time of marital separation. Identifying individuals who serve in the reserves becomes important because it allows us to account for unobserved selectivity within the analysis.

*SES.* Within this analysis, I operationalize socioeconomic status in several ways. First, I control for income, measured in total annual earned wages, and logged in the models to account for the skew within the data. Second, I include a measure of educational attainment, measured by highest level of education received. Following Schwartz and Mare (2005), education is measured in chunks as dummy variables (e.g. high school graduate, some college, etc.). I also include a measure of mother's educational attainment, operationalized in a similar fashion. All these measures have been used to account for economic prospects and economic stability in previous research.

*First Marriage Characteristics.* Experiences in first marriage undoubtedly have an impact on the rates and patterns of remarriage. In terms of demographic factors, age at first marriage and age at separation, as well as the duration of the first marriage, have important impacts on the likelihood of remarrying (Bumpass et al. 1990). Earlier ages of both marriage and separation have both been linked to higher likelihoods of remarrying, not only because separation at earlier ages allows more time and opportunity to remarry, but also because individuals who marry earlier may prefer married life. Furthermore, preferences in partners and an individual's own desirability as a partner might change with respect to age. As a result, I include measures of age at first marriage and length of first marriage within the analyses.

Additionally, children from a previous union also become an important consideration in the context of remarriage, and their presence has been shown to have a gendered effect. Men with non-resident children are more likely to remarry (Stewart, Manning, and Smock 2003), whereas women, whose children often reside with them, have less propensity to remarry (Thornton 1977). The presence of children represents for some potential partners an increased investment in the previous marriage, and a subsequent decreased ability to invest in a future marriage (Chiswick and Lehrer 1990). For this analysis, I include a binary flag indicating whether there are any resident children in the household to account for differences in remarriage patterns.

*Other Demographic Control Variables.* I also include several demographic characteristics as controls within the models because of previous research that has demonstrated their associations with changes in the patterns of family transitions. These controls include: (1) a binary flag for whether the respondent was raised in the South to account for regional variation in patterns of remarriage (Lewis and Oppenheimer 2000); (2) an indicator for whether the respondent identified as Christian (Call and Heaton 1997; Chiswick and Lehrer 1990); and (3) a binary measure of whether the respondent resided in a two-parent household, measured at age 14, to account for a respondent's experience in a specific family structure (Coleman, Ganong, and Fine 2000).

### **Analytic Strategy**

In order to examine the effects of military enlistment on remarriage, I use the Cox hazard model (1972), which is widely used to examine family transitions. The model addresses both time-to-event—in this case is the time to second marriage—and the influence of various factors in the survival function (Xie 2000). The model helps answer two questions simultaneously—how likely an event is to occur, and how long it takes for the event to occur. Cox regression is also useful in that it accounts of censored observations, whereas use of traditional regression might exclude the observations who had not experienced the event of interest. The semi-parametric nature of the model also means that fewer assumptions need to be made about the distribution of the data—this means that the researcher does not have to assume a shape to the baseline hazard before conducting the analysis. The model does assume proportional hazards, such that the influence of a covariate on the relative risk of an event, in this case remarriage, is considered constant over time. An advantage of such an assumption is that there is relative ease in the interpretation of the coefficients derived from the model.

For the purposes of the analysis, I begin with estimating models that control only for social background characteristics to examine the difference in the risk of remarriage between White and Black men (e.g., raised in a two-parent household, born in the South, and Christian). In subsequent models, I further explore how indicators of socioeconomic standing and economic prospects, such as wages and educational attainment, help change the differences in risk between the two groups. Finally, I analyze how remarriage patterns might differ between White and Black men within the military context by further controlling for whether the respondent was actively serving in the

military at the time of separation, and add an interaction term to explore how military service for Black men might change the risk of remarriage.

### **Selection into the Military**

Although the military proves to be an interesting site to explore social and demographic patterns, it also presents an analytical challenge. The military is unique, not only because of its nature as an institution, but because of its unique demographic characteristics (Teachman et al. 1993). As MacLean and Elder (2007) note, individuals who elect to serve in the military differ in a number of ways from those who do not, and must meet a minimum standard of entry to serve (i.e., achieve a minimum score on a battery of aptitude tests and meet physical requirements for entry). Previous research has demonstrated that such selection on these factors into the military is especially prevalent for Black enlistees (Teachman et al. 1993).

Selection into the military, consequently, is dealt with in several ways within the analysis. First, in addition to the indicators of socioeconomic status previously discussed, the analysis controls for a respondent's Armed Forces Qualification Test (AFQT) score. The AFQT score is a composite score that indicates a military applicant's quantitative and verbal reasoning skills. A minimum score, determined by each service, must be achieved to join the service. Fortunately, the AFQT was administered to approximately 95% of the NLSY79 cohort during a respondent's high school years, which is when the AFQT is normally administered to future enlistees. Second, following the work of Teachman and Tedrow (2008), the analysis further controls for service in the military reserves. Although service in the reserves does not provide the same benefits or resources given to those individuals in active service, the requirements for entry are the same. Thus, accounting for such service allows the analysis to account for any potential unobserved selectivity that may not be present within the analysis.

### Results

### **Descriptive Statistics**

A summary of key variables can be found in Table 4.1. The table is divided into several sections, representing different segments of the analytic sample. The first set of columns provide descriptive statistics for White men, disaggregated by military enlistment status at the time of marital separation. The second set of columns does the same for Black men. All descriptive statistics are weighted based on panel weights provided by the NLSY and represent a sample of respondents who have experienced a separation or divorce, and therefore, at risk of remarriage.

White men, regardless of military status, remarry at relatively high rates, whereas there is a stark contrast between Black men in the military (41%) and Black civilians (17%) within the sample, meaning that Black enlisted service members remarry at similar rates as White men. When it comes to timing of remarriage, enlisted Black men remarry after separation after a similar period to civilian White men, while Black civilian men experience the longest delays to remarriage. About a quarter of White men, irrespective of military affiliation, leave their first marriage with at least one child in the household—this is one area that civilian Black men have in common with White men. A higher proportion of Black enlisted men—almost a third—have children within the household at the time of marital dissolution.

Several differences exist among the sample with respect to first marriage as well. White men, on average, marry slightly earlier than Black men, and military enlistees, regardless of race, experience first marriage earlier than their respective peers in the general population. This is consistent with previous findings that show that service members often enter the service unmarried, but marry soon after entering the service (Kelty et al. 2010). There is, however, relatively little difference with respect to length of the first marriage among respondents who experienced marital dissolution, although Black enlisted men seem to experience the longest first marriages, on average, than any other group of men. Because of the earlier ages at which enlisted men marry, this also means that service members are generally younger at the time of separation. Consequently, the military sample, is relatively younger than the civilian sample.

Several additional descriptive statistics are described here because of their impact on marital transitions. In terms of family background, Black men, overall, are less likely to have been raised in a two-parent household than White men, but the difference is the greatest for Black men enlisted in the military, of which only 30% were raised in a two-parent household. When we focus the comparison to military status, men who served in the military, overall, were less likely to be raised in a two-parent household than their civilian counterparts. There are also interesting differences between the different sub-samples with respect to socioeconomic status, which plays an important part in remarriage. A higher percentage of service members are high school graduates, which is not surprising considering the minimum requirements for entry into military service (MacLean and Elder 2007). A smaller number of service members, however, are college graduates, which might be expected considering the occupational requirements and differing age structures of the samples. In terms of income and wages, enlisted White men earn, on average, less than their civilian counterparts, whereas Black enlisted men earn more, on average, than their civilian counterparts. Such findings are consistent with previous findings that show that military service provides relatively equal incentives and opportunities for Black service members (Bryant et al. 1993).

|                                   | WI                | nite              | Black             |                   |  |
|-----------------------------------|-------------------|-------------------|-------------------|-------------------|--|
|                                   | Civilian          | Military          | Civilian          | Military          |  |
| Variable                          | Mean (SD)<br>or % | Mean (SD)<br>or % | Mean (SD)<br>or % | Mean (SD)<br>or % |  |
| Outcome Variables                 |                   |                   |                   |                   |  |
| Remarried                         | 0.40              | 0.46              | 0.17              | 0.41              |  |
| Time to Second Marriage (Years)   | 2.45              | 2.01              | 2.92              | 2.54              |  |
|                                   | (1.37)            | (1.07)            | (1.43)            | (1.31)            |  |
| Characteristics of First Marriage |                   |                   |                   |                   |  |
| Age at First Marriage             | 21.77             | 20.11             | 22.66             | 20.91             |  |
|                                   | (2.96)            | (2.14)            | (2.89)            | (2.11)            |  |
| Age at Separation                 | 25.54             | 23.64             | 26.07             | 24.64             |  |
|                                   | (3.65)            | (2.79)            | (3.12)            | (3.13)            |  |
| Length of First Marriage (Years)  | 4.11              | 3.79              | 3.70              | 4.19              |  |
|                                   | (2.84)            | (2.67)            | (2.24)            | (2.85)            |  |
| Any Children in Household         | 0.26              | 0.25              | 0.27              | 0.32              |  |
| <b>Background Characteristics</b> |                   |                   |                   |                   |  |
| Raised in the South               | 0.35              | 0.31              | 0.60              | 0.65              |  |
| Christian                         | 0.81              | 0.78              | 0.81              | 0.94              |  |
| Two Parent Household              | 0.73              | 0.64              | 0.52              | 0.30              |  |
| Socioeconomic Status              |                   |                   |                   |                   |  |
| Income                            | 40044             | 34176             | 29254             | 30155             |  |
|                                   | (25810)           | (15615)           | (19671)           | (8598)            |  |
| AFQT                              | 47.74             | 60.50             | 20.12             | 33.82             |  |
|                                   | (26.80)           | (21.05)           | (19.10)           | (20.64)           |  |
| Educational Attainment:           |                   |                   |                   |                   |  |
| Less than HS                      | 0.19              | 0.09              | 0.21              | 0.02              |  |
| HS Grad                           | 0.44              | 0.45              | 0.51              | 0.67              |  |
| Some College                      | 0.14              | 0.40              | 0.15              | 0.25              |  |
| College Grad                      | 0.22              | 0.05              | 0.13              | 0.06              |  |
| Mother's Educational Attainment:  |                   |                   |                   |                   |  |
| Less than HS                      | 0.29              | 0.22              | 0.46              | 0.63              |  |
| HS Grad                           | 0.48              | 0.63              | 0.31              | 0.20              |  |
| Some College                      | 0.09              | 0.03              | 0.07              | 0.10              |  |
| College Grad                      | 0.14              | 0.13              | 0.15              | 0.07              |  |
| N                                 | 675               | 59                | 237               | 35                |  |

TABLE 4.1: Descriptive Statistics of Key Variables for Separated & Divorced Men by Race and Military Service, NLSY79

Note: Ns are unweighted. Descriptive statistics are weighted using NLSY panel weights. Descriptive statistics are excluded for Hispanic men.

## **Multivariate Analyses**

Assessing the Impact of Social Background Characteristics and Traditional Measures of SES. The results of a Cox regression proportional hazards model can be found in Table 4.2. The difference in log odds, as well as the exponentiated hazard ratios, are both displayed in the table. In general, then, positive beta coefficients suggest an increased risk to remarriage, whereas negative coefficients indicate a decreased risk. The analytic sample captures the cohort of NLSY respondents at relatively younger ages, and so associations must be understood within the context of individuals who experience marital dissolution relatively early within adulthood.

Model 1 represents the results of a Cox model controlling only for social background and characteristics related to first marriage. Of these, only a few coefficients warrant further interpretation. Consistent with previous research, a higher age at first marriage is significantly associated with a decreased risk of remarriage. Consequently, each additional year in one's age at the time of marriage is associated with an estimated 4% decrease in the risk of remarriage. Interestingly, the presence of children in the household increases the risk of remarriage, such that men with resident children have 24% greater risk for remarriage than men who do not, all else equal. Furthermore, being raised in a two-parent household increases the risk of remarriage by about 40%, net of other factors. The impact of other social background characteristics remains less conclusive.

|  | Model 1 |      |         | Model 2 |       |         |
|--|---------|------|---------|---------|-------|---------|
|  | b       | SE   | HR      | b       | SE    | HR      |
| Race & Ethnicity                             |         |      |         |         |       |         |
| Black <sup>a</sup>                           | -0.63   | 0.15 | 0.53*** | -0.45   | 0.16  | 0.64**  |
| Hispanic <sup>a</sup>                        | -0.31   | 0.15 | 0.73*   | -0.14   | 0.16  | 0.87    |
| <b>Background Characteristics</b>            |         |      |         |         |       |         |
| Two-Parent Household                         | 0.35    | 0.11 | 1.41**  | 0.22    | 0.12  | 1.25†   |
| Raised in South                              | 0.18    | 0.11 | 1.20†   | 0.23    | 0.11  | 1.26*   |
| Christian                                    | -0.08   | 0.13 | 0.92    | -0.13   | 0.13  | 0.88    |
| First Marriage Characteristics               |         |      |         |         |       |         |
| Age at First Marriage                        | -0.05   | 0.02 | 0.96*   | -0.08   | 0.02  | 0.93*** |
| Length of First Marriage                     | -0.04   | 0.02 | 0.96†   | -0.06   | 0.02  | 0.94**  |
| Child Present in Household                   | 0.25    | 0.12 | 1.28*   | 0.20    | 0.12  | 1.22†   |
| Socioeconomic Status                         |         |      |         |         |       |         |
| Income (Logged)                              |         |      |         | 0.23    | 0.07  | 1.25**  |
| Educational Attainment <sup>b</sup>          |         |      |         |         |       |         |
| High School Graduate                         |         |      |         | 0.33    | 0.16  | 1.39*   |
| Some College                                 |         |      |         | 0.14    | 0.21  | 1.15    |
| College Graduate                             |         |      |         | 0.33    | 0.20  | 1.39†   |
| Mother's Educational Attainment <sup>b</sup> |         |      |         |         |       |         |
| High School Graduate                         |         |      |         | 0.01    | 0.12  | 1.01    |
| Some College                                 |         |      |         | 0.03    | 0.21  | 1.03    |
| College Graduate                             |         |      |         | -0.03   | 0.17  | 0.97    |
| AFQT Score                                   |         |      |         | 0.01    | 0.003 | 1.01**  |

TABLE 4.2. Cox Proportional Hazards Models Examining Remarriage as a Function of Social Background Characteristics, NLSY79 (n=1197)

*Note*: HR=Hazard Ratio. Regressions are unweighted.

<sup>a</sup> Reference Category: White

<sup>b</sup>Reference Category: Less than High School

Graduate

p < 0.1. p < .05. p < .01. p < .001.

Turning to the main results, I find a difference in remarriage patterns by race and ethnicity. First, relative to White men, Black men are less likely to remarry than White men, but the magnitude of difference is much larger than differences found by other factors. Indeed, Black men are 46% less likely to remarry than White men, net of other factors. Such a finding is consistent with previous research that has found similar trends between the two groups (Bramlett and Mosher 2002; Sweeney 2002). Model 2 introduces a suite of controls previously used to encompass socioeconomic status. As one might expect, an increase in earnings leads to higher remarriage prospects for men, such that a 1% increase in earnings is associated with a 25% increase in the risk of remarriage, net of other factors. Less conclusive evidence is provided by educational attainment, although results indicate that high school graduates are 39% more likely to remarry than those individuals with less than a high school education. These increased odds also hold true for college graduates. A relatively small increase (~1%) in the risk of remarriage is also associated with higher levels of aptitude, operationalized in the model through scores on the Armed Forces Qualification Test (AFQT).

Controlling for the suite of socioeconomic characteristics ultimately decreases the original difference estimated between Black and White remarriage rates. Whereas Black men had a 46% reduced risk of remarriage in Model 1, Black men face a 36% decreased risk of remarriage after socioeconomic variables and other characteristics are accounted for. The results of this model are consistent with previous research that has seen a residual difference in the risk of remarriage remain even after controlling for these factors. Interestingly, the previous decreased risk of remarriage found between Hispanics and Whites disappears after accounting for traditional measures of socioeconomic status. The next section explores how such differences might change within the military context.

|                           | Model 1 |      |        | Model 2 |      |         |
|---------------------------|---------|------|--------|---------|------|---------|
|                           | b       | SE   | HR     | b       | SE   | HR      |
| Race & Ethnicity          |         |      |        |         |      |         |
| Black <sup>a</sup>        | -0.48   | 0.17 | 0.62** | -0.65   | 0.18 | 0.52*** |
| Hispanic <sup>a</sup>     | -0.13   | 0.16 | 0.88   | -0.16   | 0.17 | 0.86    |
| Military Service          |         |      |        |         |      |         |
| On Active Duty            | 0.26    | 0.17 | 1.29   | 0.001   | 0.22 | 1.00    |
| In Reserves               | -0.02   | 0.33 | 0.98   | -0.01   | 0.33 | 0.99    |
| Interaction Variables     |         |      |        |         |      |         |
| Black * On Active Duty    |         |      |        | 0.92    | 0.36 | 2.51*   |
| Hispanic * On Active Duty |         |      |        | 0.26    | 0.56 | 1.29    |

TABLE 4.3: Cox Proportional Hazards Models Examining Remarriage as a Function of Military Status, NLSY79 (n=1197)

*Note*: HR=Hazard Ratio. Regressions are unweighted. Regressions control for all covariates displayed previously in Table 2--to include social background, socioeconomic status, and characteristics of first marriage-- but are omitted in this table for brevity.

<sup>a</sup>Reference Category: White <sup>b</sup>Reference Category: Less than High School Graduate †p<0.1. \*p < .05. \*\*p < .01. \*\*\*p < .001.

*Remarriage in the Military Context*. Table 4.3 displays the result of a Cox regression model in which I explore how military service, which is hypothesized to provide stable and secure economic prospects in addition to a more relatively equal environment, affects patterns of remarriage. These models build on the previous models that account for social background and socioeconomic status. I first include a variable representing enlistment in the armed forces at the time of divorce, allowing us to compare the remarriage rates between military enlistees and civilians, the results of which are presented in Model 1. To account for any unobserved selectivity that might be related to entering military service, I already control for AFQT score, but now also include a measure of whether a respondent served in the reserves of the armed forces (Teachman and Tedrow 2008).

The results of this model are somewhat inconclusive in that there is no evidence that being enlisted in the military at the time of separation, net of other factors, is associated with an increased or decreased risk of remarriage. However, controlling for military service does decrease the overall likelihood of remarriage for Black men by a small margin, such that all else equal, Black men face a 38% reduced risk of remarriage compared to White men; previous models had found a 35% decreased risk for Black men.

To see how the military context might change remarriage prospects for Black men, I add an interaction term between the covariate representing identifying as Black with the indicator of having served on active duty in the military at the time of separation. These results are displayed in Model 2 of Table 4.3. The model leads to a number of interesting results. First, the results suggest that White men, regardless of military affiliation, face similar remarriage risks, all else equal. Black men in the general populace face decreased remarriage risks relative to White men, but this difference has increased in magnitude, such that civilian Black men face 48% reduced risk in remarriage. Consistent with previous research on marital transitions in the military, the results show that enlisted Black men actually face higher remarriage risks than all other groups of men within the analysis. Enlisted Black men have more than two times greater risk for remarriage than civilian Black men, and have a 27% greater risk for remarriage than White men do. Such results seem to suggest that the gap in remarriage rates not only disappears within the military context, but that the trend reverses, such that enlisted Black men are more likely to remarry than enlisted White men, at least within the early years after separation.

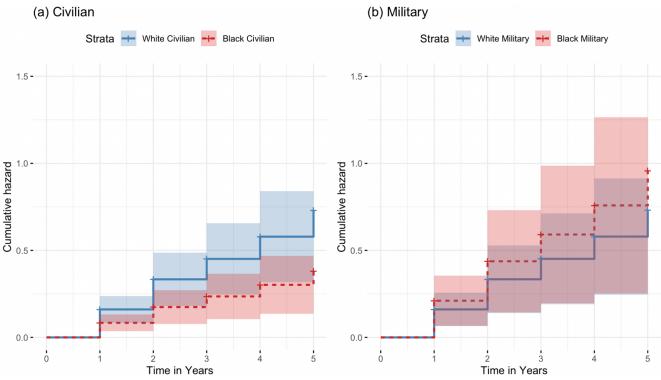


FIGURE 4.1: Estimated Survival Curves of Remarriage for Men by Race/Ethnicity and Military Status

Note: Survival curves are created for the five years after first marital separation using estimates from the Cox regression results in Table 3, Model 2. The curves reflect a respondent who was raised in the South; Christian; a high school graduate; raised in a two-parent household; had a mother who was a high school graduate; married at age 21; separated from their first marriage after 3 years; had no children in the household at time of separation, and earned an income of \$30,000.

As interaction effects can often be difficult to interpret, I produce graphs, displayed in Figure 4.1, of the estimated cumulative hazard curves from the Cox regression model presented in Model 2 of Table 4.3 to compare the probability of remarriage between Whites and Blacks both within and outside of the military context. To estimate each curve, I hold constant social background and socioeconomic characteristics, but allow military service at the time of separation, and race and ethnicity to vary, to estimate four separate survival curves. Figure 4.1 is separated into two separate graphs for ease of comparison. Figure 4.1a estimates the survival curves for White and Black men in the civilian population. The figure makes clear that among civilians, White men are far more likely to remarry at each period, and that this difference increases over

time. Although the graphs display confidence intervals which overlap, this should not cause concern. Indeed, the overlap does not contradict previous estimates that the difference in the average remarriage patterns between the two groups are significantly different (Schenker and Gentleman 2001).

Figure 4.1b, alternatively, shows the survival curves estimated for White and Black men who were serving in the military at the time of separation. The curves within Figure 4.1b subsequently show a smaller difference in the predicted remarriage rates between White and Black men within the military, but also clearly show that enlisted Black men are more likely to remarry than their White peers. Of note within this figure is that the survival curve estimated for White men in the military is the same as the survival curve for civilian White men, a result previously established by the models in Table 4.3. As a result, the curves in Figure 1b also show that enlisted Black men are also more likely to remarry than both their White and Black civilian counterparts.

## **Discussion and Conclusion**

This study aimed to explore whether the gap in remarriage rates found within the United States persists within a military context. The results suggest that within the military, the gap in remarriage risk between Black and White men not only disappears, but reverses. Black enlisted men have a higher risk of remarriage than their White peers in the early years following marital separation. The results further indicate that Black service members experience a higher risk of remarriage than White men in the civilian populace. Why are differences by race and ethnicity reduced in the military context? Previous research has long established that the military as an institution provides equal opportunities in terms of promotions and access to resources, and contains fewer structural barriers, like discrimination, than the civilian context (Lundquist 2004, 2006; Teachman and Tedrow 2008). Marital search theory suggests that this relative equity decreases the differential attractiveness of partners by facilitating higher and more stable socioeconomic prospects, and thus leading to a higher likelihood of remarriage. The results of this study tentatively suggest that given more equal opportunities and reduced discrimination within broader American society, Black men would experience higher rates of remarriage, bringing parity in the rates of marital transitions with their White peers.

This study, while providing some answers, remains largely descriptive, unable to fully parse out the mechanisms that drive heterogeneity in remarriage patterns between Black and White Americans. There is, of course, the argument that the results can be partially explained by selection into the military and unobserved heterogeneity. I attempted to resolve this by including a broad set of controls that account for entry into military service, such as scores on the military entrance exam (AFQT) and socioeconomic background characteristics. I also attempted to account for unobserved heterogeneity by including a control for service in the military reserves, as reservists would meet similar standards for entry as their active duty counterparts. Furthermore, if unobserved selectivity were the primary cause of the results of this analysis, we might observe that veterans of the military face a similar risk of remarriage to their actively serving enlisted counterparts in the service. However, supplementary analysis showed that veterans (those who were in the military prior to first marital separation) faced remarriage risks that differed. If the military, as I have previously argued, represents an institution that provides equal resources and stable economic prospects, such signals to potential partners may not persist once an individual leaves military service. This supplementary finding suggests that the military environment, and not just selection or experience in the military, helps drive differences in remarriage patterns.

Another potential competing explanation for the results is that military service opens a different market of potential partners that would not otherwise exist—an assertion difficult to operationalize within my models. Some previous research shows, for instance, that both Black and White service members marry across ethnic and racial lines more frequently than their civilian counterparts (Heaton and Jacobson 2000). This does not necessarily discount the idea that economic prospects still remain an important part of the equation. The higher number of interracial marriages might be explained by the increased attractiveness of a military partner who has secure employment and stable wages, yet such an assertion remains unexplored within this analysis. Once again, more research must be executed to fully disentangle all the possible mechanisms with respect to both the preferences of individuals, and the supply of partners.

A limitation of this study is that the data used in the analysis ultimately describes a cohort of individuals during early adulthood. Because I limited the analysis to 15 years of data from 1979 to 1993, the data does not capture divorce at later ages for this cohort of individuals. It is possible that the risk of remarriage changes after a certain point not captured in the data. The NLSY79, however, remains one of the few reliable longitudinal surveys in which there exists a large enough sample of military service members and members of the civilian populace alike to conduct comparisons carried out in this analysis. Even then, the sample of military service members within the study was relatively small, and more data must be collected to execute more conclusive comparisons. Finally, the limited data on women within the military led to their exclusion from the analysis. Previous research has shown that processes leading to various family transitions differ between men and women (Shafer and James 2013; Smock 1990; Sweeney 1997), particularly in the context of remarriage.

Although remarriage is becoming a rarer phenomenon in the context of family transitions, remarriage ultimately helps shape various life outcomes, to include psycho-social well-being and economic stability. Thus, understanding the potential reasons for differences in remarriage patterns between Black and White men, and identifying potential resolutions to such differences can help alleviate some of the racial and ethnic inequalities that occur during the life course. Using the military as a context to understand American society more broadly, I find that Black service members remarry at higher rates than White service members, a reversal of the difference in the remarriage patterns found between White and Black civilian men. Although I am unable to directly test hypotheses that explain such a reversal, previous research and theory suggest that the increased remarriage rates of Black service members can be attributed to the increased attractiveness a Black service member has due to the stable socioeconomic prospects and relatively equal economic opportunities the military provides. This theoretical explanation further invites the possibility that rates of remarriage would ultimately be more uniform between Black and White men in the American populace if Black men were afforded relatively equal economic opportunities compared to White men, as they are in the U.S. military.

## Chapter 5: Conclusion

Military service continues to serve as one of many post-secondary options that young adults choose to pursue after high school graduation (Hexter and El-Khawas 1988). Past research has shown that, like many life experiences, the effects of military service can vary widely for different sociodemographic groups (Angrist 1990; Kleykamp 2009). This dissertation extends and updates previous work on military service in several ways. First, this dissertation seeks to understand how a record of military service, particularly in the era of the Global War on Terror, affects employers' perceptions in the hiring process of Black and Latino job candidates. Although some previous research has addressed how Black veterans fare after leaving the service (Angrist 1990, 1998), very little is known about how the outcomes of military service might differ for other groups, particularly Latinos. Consequently, the research within this dissertation creates a more holistic understanding of military service and the life course. The first two chapters of the dissertation further examine how other social background characteristics, like educational attainment and nativity status, may interact to influence employers' hiring decisions. By doing so, this research not only allows to create more direct comparisons between post-secondary trajectories, like community college and the military, but also delves into previously unexplored comparisons between native-born and immigrant Latinos in the low-wage labor market.

I find, as other research often has, that a history of military service can often improve perceptions about a job candidate; this positive effect exists for all the demographic characteristics tested within the survey experiment, although the magnitude of the premium varies. Indeed, military service proves to provide the largest comparative advantage in the low-wage job application process for some individuals who have previously been found to be most disadvantaged in such a process. I find that individuals who hold a GED, a group whose educational attainment often hinders future job prospects (Rumberger 2012), and immigrants, who may be disadvantaged because of fears of cultural fit or language ability (Almeida et al. 2012), improve their employment prospects the most from military service in minimum-wage positions. Job applicants from both groups are ultimately able to close the gap with their peers, being recommended for a follow-on interview at rates on par with high school graduates without a record of military service.

Such findings are inextricably related to the positive way many Americans view military service. The military remains one of the most trusted institutions in American society today (Pew Research Center 2019). In the past twenty years, the Department of Defense has ensured that such support is explicit and outright, paying over \$5 million, for example, to the NFL to sponsor events honoring troops (Ufford 2015). Unlike veterans of the unpopular Vietnam War, veterans of these conflicts received overwhelming support from the public. Thus, such positive effects found in my research should not necessarily be interpreted as a call to military service. Even with potential benefits in the labor market, serving in the military is not always an easy task, requiring frequent disruptions to one's life, and involving the possibility of injury or even death (Lundquist and Xu 2014; MacLean and Elder 2007). Moreover, based on previous research on the effects of a four-year degree (Brand and Xie 2010), it is likely that those who choose to enlist in the military have the most to gain from pursuing a four-year degree directly.

Surprisingly, I also find from the survey experiment that even among civilians, male Black and native-born Latino job candidates were preferred by employers in the low-wage labor market. Such a finding seems contrary to previous research on employer preferences (Pager 2003; Pager et al. 2009; Quillian et al. 2017). As I previously have suggested, such results are probably more indicative of occupational sorting of racial and ethnic minority job candidates. Consequently, the research in this survey experiment requires not only replication, but also expansion in an effort to understand whether such findings persist in other occupations and career trajectories.

In my final substantive chapter of my dissertation, I find that the gap in remarriage rates found between Black and White men in the United States not only disappears, but reverses in the military context. Black male service members experience remarriage rates that exceed not only their White peers in the military, but their White peers in the civilian sector as well. Such marital transitions hold important implications for not only the individuals entering or leaving unions, but for other members of a family, such as children, as well (Amato 2000; Smock et al. 1999; Tach and Eads 2015). I argue that such findings can be attributed to the fact that service members, irrespective of their race/ethnicity, are more attractive to potential partners because of their socioeconomic stability and opportunity for social mobility (Oppenheimer 1988). The increased rates of remarriage for Black service members, then, are a result of better socioeconomic prospects and decreased discrimination found in the military that might otherwise be experienced in American society at large (Lundquist 2006, 2008). Such results continue to suggest that differences in rates of marital transitions are not a result of cultural differences among Americans, but deep structural issues facing significant portions of the American population.

It is important that we continue to delve into how military service affects other populations within the United States. The research in this dissertation focused on the heterogeneity that might exist in the effects of military service on various life outcomes among Black, Latino, and White men. The research did not focus on how military service might affect the occupational and marital trajectories of other groups, notably women. Women make up a small, but growing percentage of service members (DMDC 2019). However, in the past few years, the career opportunities and trajectories for women in the military have drastically changed. Women were permitted to enter

combat arms positions for the first time in 2015, and future research should attend to how the marked shift in the manner of military service for women might change things like employers' perceptions. Additionally, this research did not examine outcomes for other minority groups, notably Asian Americans. Asians make up another racial and ethnic minority group that continues to be an overrepresented within the armed forces; a large percentage of immigrants who choose to enlist in the military for the purposes of citizenship also hail from Asia (Huebl 2018). Although I explore the effects of military service for immigrants to the United States, this group is large and heterogeneous, and more research is needed in this area to parse out and highlight potentially disparate outcomes from military service.

For scholars of social stratification and intergenerational mobility, the military remains an area that merits attention. Although a smaller segment of the population is now serving, about 150,000 individuals continue to enlist in the military every year (Kapp 2021), and many of these enlistees join the military with the hopes of one day climbing the ladder of social mobility within the United States (Bachman et al. 2000; Seeborg 1994). At the same time, a large proportion of today's military enlistees now come from a family with a history of military service, creating what some have called a "warrior caste" (Schafer 2017). Thus, any premiums or disadvantages stemming from military service may have long term, multi-generational effects with respect to income inequality, social mobility, and a number of other life outcomes. Despite the drawdown of several conflicts overseas in the past few years, the United States will most likely continue to be involved in various engagements abroad as a world power. At present, there exists a question as to how far the United States' military will involve itself in the ongoing conflict between Russia and Ukraine. Thus, how the experience of military service and armed conflict affects the life course

of service members and veterans will always require the attention of sociologists and demographers.

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