Military Service and Entry into Marriage: Comparing Service Members to Civilians

Paul Hemez*
Bowling Green State University
Center for Family and Demographic Research

Faculty Advisor: Dr. Wendy Manning
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*Paul Hemez, 005 Williams Hall Center for Family & Demographic Research, BGSU
paulhemez@gmail.com

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Abstract

While enlisting in the armed forces was positively associated with marriage during the first fifteen years of the All-Volunteer Force, the relationship between military service and entry into marriage among subsequent generations of young adults has been unexplored. Using the National Longitudinal Survey of Youth 1997, this study aims to examine the influence of enlistment on entry into marriage for a contemporary cohort of young men. Event-history analyses reveal that men who served were significantly more likely to marry than their civilian counterparts. Furthermore, there was no difference in the odds of marriage among Black and White men in the military, while some evidence suggests that Hispanic enlistees were more likely to marry than Whites who also enlisted. These findings offer insights into pathways to marriage for social groups who are disadvantaged in the marriage market.
Marriage rates in the United States have declined and remained at a 40-year low point since 2010 (Wu, 2015). This retreat from marriage has been accompanied by a historic highpoint in the age of entry into marital unions, as women reported marrying at a median age of 27 in 2014, while men did so over the age of 29 (Anderson & Payne, 2016). Changing socioeconomic opportunities are a key reason for the decline and delay in marriage. Improved socioeconomic circumstances make for more attractive marriage partners, accelerating entry into marriage (Qian, 2014). Reduced economic opportunities, on the other hand, prevent disadvantaged group members (minority racial and ethnic groups, and those with less education) from securing the prerequisites to contemporary marriage, and are less likely to marry (Cherlin, 2004).

One pathway to improved economic circumstances that is widely available to racial and ethnic minorities and those from more disadvantaged backgrounds is military service. Military service during the first decades of the all-volunteer era (1973 – present) has served as a “springboard” to improve socioeconomic attainment because service men are presented with a unique set of opportunities that comparable civilians may otherwise be unable to access (Teachman, 2007a; Angrist, 1998). These opportunities include various health, employment, and housing benefits, which present enlistees with greater social capital and attractive partners, as access to these benefits often extends to family members (Hogan & Seifer, 2009). In fact, military service has been linked to earlier entry into marriage among men in the first cohorts of the all-volunteer era (primarily through the use of the NLSY-79 dataset) (e.g. Teachman, 2007b; Lundquist, 2004; Sweeney, 2002).

To date no research has examined the role of military service among a recent cohort of young men. Over 2 million young adults\(^1\) have served since the turn of the century and

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\(^{1}\) Author’s calculations using 2014 American Community Survey, 1 year estimates: 2,053,581 male respondents aged 35 or younger served in September of 2001 or later (weighted).
disproportionate levels of military service are experienced by Blacks, while Hispanics have contributed to a growing proportion of the military over the past decade (Kelty, Kleykamp, & Segal, 2010; Military Community and Family Policy, 2014; Parker, Cilluffo, & Stepler, 2017; U.S. Census Bureau, 2014). A contemporary analysis of the influence of military service on entry into marriage is important as numerous shifts have occurred in the economic climate and in marriage trends within the United States since the first half of the 1980s, when the NLSY-79 reached its peak years of respondents on active duty. Furthermore, the majority of current active duty service members – and a substantial proportion of today’s veterans – enlisted after 9/11, presenting this population with a set of service experiences and benefits that differ from those experienced by previous generations of service members. Such changes call into question the relevance that the previously established relationship between military service and entry into marriage has among more current enlistees and their counterparts who have not served.

Using the National Longitudinal Survey of Youth 1997 (NLSY-97), the present study aims to examine the association between military service and entry into marriage among a contemporary population of active duty service members and civilians. The NLSY-97’s longitudinal design permits controls for selectivity into the military and into marriage, reducing the likelihood that these results are due to pre-existing characteristics. Furthermore, the NLSY-97 consists of an oversample of Blacks and Hispanics, allowing for an empirical test of the “springboard” effect, as the military provides an economic basis for marriage among young adults in disadvantaged minority groups.

The present study will expand the literature in three important ways. First, the rich dataset, NLSY-97, includes indicators of respondents’ service experiences in the military. Notably, I will distinguish the influence of serving in a combat zone. Although previous studies
have examined the consequences of service in a combat zone on marital stability (e.g. Ruger, Wilson, & Waddoups, 2002), few have considered the ways in which this type of service experience influences the likelihood and timing of marriage entry. Second, previous studies do not consider the ways in which enlisting can influence subsequent life course outcomes among the growing population of Hispanics in the United States. Military service could influence entry into marriage differently for this group compared to non-Hispanic Whites and non-Hispanic Blacks, due to Hispanics’ younger median age at first marriage (Payne, 2012). Third, this study focuses on a contemporary cohort of young men. The labor market, marriage market, and military experiences of contemporary young adults vary from those of older generations, implying that enlistment may no longer influence marriage patterns in the same fashion as it has in the past.

**Background**

**Military Service and Entry into Marriage across Eras**

The influence of enlisting in the military on marital timing varies according to one’s era of service. During eras in which enlistment was determined through the draft, such as World War II and the Korean War, military service largely delayed entry into marriage as it disrupted the lives of its service members. Young men’s traditional sequencing of life events during these eras (completing an education, followed by attaining a steady employment, then marrying, and finally raising a family) was interrupted for several years among those who were selected to serve, resulting in enlistees marrying later than those with no service experience (Kelty, Kleykamp, & Segal, 2010; Elder, 1986; Hogan, 1981).

Following the Korean conflict, the military revised its policies regarding income and benefits to attract new recruits and incentivize current service members to stay in the armed
forces, in order to maintain a large peacetime army of volunteer enlistees during the Cold War. These changes included the extension of health care benefits to active duty dependents, housing for service members’ families, and increased pay for enlistees with dependents, which promoted partnerships among service members, and by 1960 military family members outnumbered service members (Albano, 1994; Dolfini-Reed & Jebo, 2000). With the termination of the draft in 1973, the military continued to provide these pro-family benefits to service members as an increasing portion of married individuals enlisted in the armed forces (Albano, 1994; Kelty et al., 2010).

Current literature on military service during the first decades of the all-volunteer era points to these unique benefits as an explanation for the positive association between enlisting in the military and the odds of entry into marriage observed among young men and women during this time (Teachman, 2007b; Lundquist, 2004). For example, it is argued that such benefits helped service members achieve levels of financial stability and employment that would have otherwise been inaccessible to these individuals, had they not enlisted (Angrist, 1998). As economic stability and the accumulation of wealth have been associated with greater likelihood of entry into marriage (e.g. Cherlin, 2004; Schneider, 2011; Sweeney, 2002), military service presented enlistees of the all-volunteer force (AVF) with the means to achieve the prerequisites to marriage. However, Teachman (2007b) presents evidence that serving on active duty at the beginning of the AVF remained significantly related to entry into marriage net of controls for income and economic stability, suggesting that other factors stimulated entry into marriage during the early decades of this service era.

Researchers have highlighted non-economic opportunities for service members of the AVF that may provide incentives to marry. Married service members, for example, are
sometimes housed in an independent household with their spouse, instead of barracks or dormitories where unmarried enlistees typically reside (Kelty et al. 2010). Qualitative reports of service member’s motivations to marry reveal that residence outside of the barracks and improved living circumstances, such as living in an apartment or house, encouraged enlistees to marry (Lundquist & Xu, 2014). Some enlistees even temporarily marry other service members, creating “pseudo-marriages” where the benefits presented to married military personnel are compounded within the union (Lundquist & Smith, 2005). Furthermore, pro-family programs have helped to reduce enlistees’ burden of balancing the competing roles of being a service member and a marriage partner. As both the military and marriage have been labeled as greedy institutions (institutions which demand a large amount of time and energy from its members), those in one such institution may have previously been unable to enter into another (Segal, 1986). The inclusion of programs such as free day care centers and military spouse support services, however, reduce the role incompatibility between marriage and military service, promoting entry into marriage among service members of the AVF (Teachman, 2007b).

Military service during the first decades of the AVF was especially favorable for entry into marriage among Blacks. Within the general United States population, Blacks exhibited – and continue to experience – lower odds of marriage than comparable Whites (Lundquist, 2004; Manning & Smock, 1995; Qian 2014). The marriage gap between Whites and Blacks has been partially explained by differences in economic opportunities experienced among these groups. Scholars argue that labor market stratification and Black men’s greater likelihood of living in poverty reduces their marriage rates when compared to those of Whites (Lundquist, 2004; Lichter, LeClere, & McLaughlin, 1991; Manning & Smock, 1995). Empirical evidence also
suggests that Blacks place greater value on economic stability before entering marriage, exacerbating the marriage gap between Whites and Blacks (Bulcroft & Bulcroft, 1993).

The institution of the military, however, presented enlistees with a vastly different environment than that of civilian life. Teachman (2007b) and Lundquist (2004) argue the military is a predominately race-blind environment, wherein service members during the first decades of the AVF holding minority race or ethnic statuses were less influenced by negative outcomes due to racial discrimination or segregation that were – and remain – prevalent outside of the armed forces. This is a result of the military’s hierarchical and bureaucratic structure, where pay is determined by rank and where race does not have a strong influence on one’s chances of upward mobility within the institution (Daula, Smith, & Nord, 1990; Teachman, 2007b). Life-course scholars refer to the military as a “bridging environment” for minority or economically disadvantaged men and women, as enlistees could benefit from education, training, and resources that would not have been accessible to them in a civilian setting (Wilmoth & London, 2013). Such opportunities would “springboard” disadvantaged enlistees to improved socioeconomic circumstances, and thus increase their chances of entering into marriage. Whether this mechanism is relevant among Hispanic enlistees remains unexplored in the current literature.

Overall, past research largely supports the notion that military service was positively related with entry into marriage during the first several decades of the AVF. The economic and non-economic benefits associated with enlisting in the military permitted and encouraged young adults to marry. Finally, these benefits were especially advantageous for those who were less educated and those holding minority group statuses, as the enlistment provided access to resources that their civilian counterparts could not attain.

Selection into the Institutions of Marriage and the Military
Although the link between military service and entry into marriage has been well established among prior generations and service eras – especially concerning the first decades of the all-volunteer force – marriage trends and behaviors have shifted over the past 40 years. Marriage rates, for example, decreased by over 50% between 1970 and 2010 (Hemez, 2016). Furthermore, the median age of men who do marry has risen more than 4 years over this period, and continues to increase (Anderson & Payne, 2016). These trends are explained by the notion that marriage among contemporary young adults has been denoted to as a marker of prestige that can only be attained after having completed an education, maintaining a steady employment, and accumulated enough wealth to enter into institution (Cherlin, 2004). Family scholars have emphasized young adults’ increasing difficulty in reaching these prerequisites as a central reason for the retreat from marriage experienced over the past decades (Manning, Brown, & Payne, 2014; Sironi & Furstenberg, 2012).

Such a trend is particularly detrimental for entry into marriage among those coming from disadvantaged backgrounds. Manning, Brown, & Payne (2014) document that the decline in the proportion of women who ever married was greatest among Blacks, whereas Whites and Hispanics experienced much more modest declines. Similar trends were observed regarding women’s educational attainment, as the share with a college degree or more who married did not change between 1988 and 2006-2010, whereas marriage among women with lower levels of education became less common. In recent decades, earnings have become more important for entry into marriage among recent cohorts of women, and have remain a significant predictor of marriage among men (Sweeney, 2002). Finally, marriage patterns continue to be influenced by geographic region of residence, as men and women who grew up in rural areas and in the South are more likely to marry at younger ages than those who did not (Uecker & Stokes, 2008). All of
these factors indicate that entry into marriage after the turn of the 21st century has become very selective on advantaged characteristics.

The range of education, aptitude, health, and personality standards that are necessary to enlist into the armed forces also make service members a select group. Department of Defense guidelines, dictate that at least 90% of new enlistees must have a high school diploma, and that at least 60% score in the top 50th percentile (categories I-IIIA) on the Armed Forces Qualifications Test (AFQT). Those who score in the bottom 10% of AFQT scores (category V) are unable to enlist. Furthermore, applicants must be mentally and physically healthy, have no dependents under the age of 18 if they are not married, and cannot be under any form of judicial restraint such as probation or parole (National Research Council, 2003). These benchmarks for enlistees have contributed to the recruitment of mainly persons who do not hold high levels of socioeconomic status, but who also are not from the lowest income groups either (Segal & Segal, 2004).

Although these enlistment standards have remained relatively stable, several important factors have influenced the selection of men and women who are accepted into the armed forces. An error in the scoring techniques of the AFQT in the late 1970s, for example, placed recruits who scored between the 10th and 30th percentile (category IV) of the AFQT into the 31st to 50th percentile (category IIIB). As a result, the military accepted a large number of applicants who would not otherwise have been accepted to serve (Han, 2017). Additionally, the quality of recruits is highly dependent on the quantity of enlistment applications each year. Following the 2001 terrorist attacks, the military was able to raise the quality of their recruits due to increases in the number of men and women who wanted to enlist. In other words, entry into the military became more selective on higher aptitude in the years following 2001 (Kapp, 2013).
Current Investigation

Changes in marriage trends, paired with changes in the selection of those who are eligible to serve on active duty over the past several decades bring into question whether findings regarding the marriage patterns of service men in the early years of the AVF remain relevant among more recent cohorts. However, I expect that the today’s military service members continue to be presented with a unique set of opportunities that will promote access to the precursors of contemporary marriage. Those accepted into the armed forces, for example, are inherently employed in a work force that provides steady wages. Additionally, opportunities for upward mobility in the military offer young adults the chance to establish careers in the armed forces. Enlistees are also presented with access to various benefits that are conducive to one’s transition into adulthood. These include educational and housing benefits, allowing young adults to accumulate wealth and improve their socioeconomic position. All in all, many of the mechanisms that contributed to increased risk of entry into marriage among enlistees during the first decades of the AVF continue to be relevant – if not more relevant – among contemporary enlistees. Therefore, I expect that men on active military service will be more likely to marry than their civilian counterparts.

Consistent with prior literature, I also expect these mechanisms to be more salient for young adults from disadvantaged backgrounds. Young adults holding racial/ethnic minority statuses will benefit more from enlisting than their White counterparts as minorities have, on average, more difficulty attaining the socioeconomic precursors to marriage. The military being a less stratified and discriminatory environment than that of civilian life, however, alleviates the barriers that racial/ethnic minorities face when attempting to achieve the prerequisites to contemporary marriage. As a result, I predict that the effect of active military service on the odds
of marriage will be greatest among Black and Hispanic men. However, among those serving on active duty, I expect to find no race/ethnic differences in the odds of marriage.

I also consider variation in the odds of entry into marriage among service men based on experiences in the military and enlistment status. Veterans, for example, receive different benefits after their service period from those received on active duty. Additionally, they reside in a civilian context, and must allocate funds to costs such as housing and food that were previously paid for during their time in the military. For this reason I expect that those with veteran status will have lower odds of marriage compared to men serving on active duty.

Finally, the various types of occupations and destinations for deployment in the armed forces present enlistees with differing experiences during their time in the military. In the present study, I consider how experience in a combat zone alters the odds of entry into marriage. I expect the long-range deployment of service men who serve in a combat zone (e.g. Iraq and Afghanistan) will not be conducive to marriage. Furthermore, emotional and behavioral complications associated with combat experiences could make young men who serve in these zones less attractive marriage partners, reducing their odds of marriage (Ferrier-Auerbach et al. 2010; Hoge, Auchterlonie, & Milliken, 2006). For these reasons, I predict that service in a combat zone will reduce the odds of entry into marriage among enlistees.

Data and Methods

Data

To investigate the relationship between military enlistment and entry into marriage, I utilize the National Longitudinal Survey of Youth 1997 (NLSY-97). Sponsored by the Bureau of Labor Statistics, the NLSY-97 is comprised of a sample of 6,748 nationally representative young men and women, and an oversample of 2,236 Blacks and Hispanics – resulting in a final sample
size of 8,984 respondents (Bureau of Labor Statistics, 2014). The first survey round was conducted in 1997, during which respondents were between the ages of 12 and 18 at the time of the interview, and yearly rounds have been administered through 2011. After 2011, the survey follows a biennial design, and interviews are conducted on odd numbered years. Because of the lack of information between 2011 and 2013, my analyses are restricted to the first 15 rounds of annual surveys (1997-2011). Although some attrition is present in the data, the NLSY-97 retains over 80% of originally sampled respondents throughout the first 15 rounds of the survey.

Analyses are limited to White, Black, and Hispanic young men as only 112 women and 3 men who did not hold one of these race/ethnic statuses in the NLSY-97 reported ever entering into the armed forces between 1997 and 2011. The analytical sample is therefore constrained to 4,559 men aged 32 or younger. I expect that restricting my data to this age range will not constrain the number of observations who enter into the military in later years, as the majority of male service members enlist prior to age 30, and enlistment in most branches is restricted to those younger than 34 (Military.com, 2016; Military Community and Family Policy, 2014).

Variables

My primary dependent variable is a dichotomous measure of entry into marriage, based on respondents’ date (month and year) of first marriage. Respondents are coded as 0 for each survey month prior to this date to signify being “never married”. Once their date of first marriage is reached, respondents are coded as a 1 to signify entry into marriage that month.

A time-varying measure of active duty service is created using weekly employment histories to serve as my primary independent variable. Respondents are coded as a 1 if they were enlisted during any number of weeks in a given month, otherwise 0. In my sample, 354 (or about 9.6 percent) of men reported serving in the armed forces at some point between 1997 and 2011.
Among the sampled men who enlisted, 203 were White (57%), 76 were Black (21%), and the remaining 75 were Hispanic (21%).

Once participants transition from active duty to any other employment status, they are considered to be a veteran. If men left the military for a period of time and returned in a later month – in which case they would simultaneously be on active duty and a veteran – they are coded as exclusively active duty status to maintain mutually exclusive categories. To examine the influence of serving in a combat zone during one’s enlistment period, I make use of a question asking all veterans and active duty members if they ever served in a combat zone. Responses are dichotomized where a 1 represents service in a combat zone, otherwise 0.

A set of control variables are created to account for selectivity into marriage and the military. These covariates include a measure of the respondents’ age (measured in months); dichotomous measures of respondents’ race and ethnicity (non-Hispanic White, non-Hispanic Black, Hispanic); educational attainment during each month (less than high school, high school degree, some college, 4 or more years of college); a dichotomous measure of school enrollment status; respondents’ Armed Services Vocational Aptitude Battery (ASVAB) score distribution percentile; a continuous measure of income in the past year (adjusted to 1997 dollars); a dichotomous measure representing whether the respondent lived with both of their parents in 1997; a dichotomous indicator representing whether the participants lived in a rural area in the first round; and a dichotomous indicator of residence in the South in 1997 (states considered to be in the South are determined by the U.S. Census Bureau).

**Methods**

The data are converted to person-months to conduct discrete-time event-history analyses assessing the odds of entry into marriage. Starting at age 18, respondents are observed until they
marry, reach the 15th survey round, or attrite/are not interviewed for three or more consecutive rounds. In the first month, my sample consists of 3,680 men who had not married in a prior month. By the age of twenty-five, 828 of these men had married and were no longer in the sample, resulting in a sample size of 2,852 respondents.

The multivariate analyses focus on the influence of active military service, and models include the rich set of control variables that temporally precede marriage or censoring. Racial and ethnic differences in the effect of military service are tested with interaction coefficients. These interaction coefficients are created by multiplying values of the dichotomous indicator of military service with dichotomous measures of each race/ethnic category. The covariates that are created through this method are two interaction terms coded as a 1 if respondents are a particular racial/ethnic status and serving in the armed forces, and as a 0 otherwise. I also conduct analyses among the subsample of men who reported active duty during the analytical periods, and include measures of service experiences (e.g. veteran status and service in a combat zone) to examine differences in the odds of marriage based on experiences in the military.

**Results**

[Table 1 about here]

**Descriptive Results**

Table 1 presents the weighted descriptive statistics of men at specific ages. I follow Teachman’s (2007b, p. 396) report of descriptive statistics the ages of 18 and 25, and indicate as to how the characteristics of the analytical sample changes over time. It should be noted that these estimates represent unmarried men because respondents are omitted after entry into marriage. Therefore, the sample size decreases from age 18 to 25, and estimates of time-invariant descriptive statistics may not be consistent across ages due to the omission of men as they married.
In the first analytical month, during which respondents were age 18, 0.05% of men married. By their 25th birthday, the share of men who had married grew to 24% for the sample as a whole. However, this share varied by military enlistment status, as nearly half of men who served at some point between 1997 and 2011 had married by age 25, compared less than one quarter of those who never served in the military.

Among men who enlisted after 1997, about 6% were on active duty at the age of 18, and 40% reported active duty during the month they turned 25. The average age of enlistment for this cohort of men was 21.5 (not shown). Slightly over one-third of ever enlisted men born between 1980 and 1984 served in a combat zone during their service period.

The majority of the sample is non-Hispanic White, and slightly greater shares reported being non-Hispanic Black than Hispanic. Most men had less than a high school education at the age of 18. However, the sample became more educated by the time they reach the age of 25, with the modal group reporting at least a four years of college (28%). On their 18th birthday, nearly two-thirds of men were enrolled in school. By age 25, enrollment declined to about 15%, although a significantly larger share of ever enlisted men were enrolled in school at this age. Enlistedees reported slightly higher ASVAB scores than civilian men, as well as significantly higher incomes during young adulthood. More than half of enlistees and civilians lived with both parents at the start of the survey. Furthermore, slightly over a one-quarter of these men lived in a rural area and about one-third lived in a Southern state in 1997. Because Table 1 reflects the characteristics of unmarried men in the sample, the estimates presented at the age of 25 are likely influenced by selection processes surrounding entry into marriage and do not reflect the characteristics of the overall population of men born between 1980 and 1984.

[Figure 1 about here]
Figure 1 presents the proportion of men who married between the ages of 18 and 28, by enlistment status and race/ethnicity. A greater proportion of service members in each race/ethnic group married between these ages, compared to civilians. Civilian Blacks had the smallest shares of entry into marriage, followed by civilian Whites and Hispanics, who experience similar shares of entry into the institution. Among those who enlisted, Hispanics had the greatest share of men entering marriage by age 28, whereas White and Black service men experience similar patterns of entry into marriage. At the bivariate level, these results support the notion that military service increases the young men’s odds of entry into a first marriage.

[Table 2 about here]

**Multivariate Results**

Discrete-time event history models predicting entry into marriage among men born between 1980 and 1984 are presented in Table 2. Model 1 uses a quadratic function of age (in month) and active military service to model the odds of entry into marriage, and suggests that men who are in the military experience odds of marriage that are \((2.74-1)*100 = 174\%\) greater than men who are not serving, when only age is included as a control. Model 2 adds the remaining controls. The odds ratio of active military service remains statistically significant, suggesting that men who are in the military are 144% more likely to marry than men who are not, net of other covariates.²

[Figure 2 about here]

² Supplementary analyses were conducted to examine a scenario in which young men marry in anticipation of (i.e. shortly before) enlisting in the armed forces. A lagged active military service indicator was coded as a 1 during any month the respondent was in the military, and during the 12 months prior to their month of enlistment; otherwise 0. Sensitivity analyses using this lagged indicator yields similar results to those presented in Table 2, and are available upon request.
Interaction terms between active military service and racial/ethnic status are added in the final model of Table 2. Model 3 indicates that active military service increases the odds of marriage among race/ethnic minorities. The influence of military service on the odds of marriage are presented for each race/ethnic group in Figure 2. Military service significantly increases the risk of entry into marriage across each racial/ethnic category. Enlistment has the greatest effect among Hispanics, who experience odds of entry into marriage that are 303% greater for Hispanic service members than Hispanic civilians. Similarly, the odds of a first marriage among Black men are 240% greater for those in the military than Blacks who are not enlisted. The effect of active military is smallest among White men, although these men are more than twice as likely to marry if they are serving, net of socioeconomic and demographic factors.

To examine if the effects of active military service significantly differ between racial/ethnic groups, I replicate Model 3 from Table 2 but reverse code the dichotomous measure of active military service to represent civilian status, such that 1 = not on active service and 0 = active service (not shown). Including this measure alters the reference group for the effect of military service, and the coefficients for Blacks and Hispanics now indicate whether racial/ethnic minorities in the military experience odds of marriage that are different from those of White service men. These coefficients and their significance are presented in Figure 3. Relative to Whites on active duty, Blacks who are also serving experience no difference in their odds of marriage. Hispanic service men, on the other hand, experience odds of marriage that are significantly greater than those of Whites, and marginally greater than Black service men.
Table 3 presents the odds ratios of entry into marriage among the subsample of young men who enlisted. These analyses are conducted to examine the ways in which service experiences alter the odds of marriage. Model 1 indicates that the risk of entry into marriage is significantly lower both before, and after, men’s active duty period when no controls are included in the model. Model 2 adds a dichotomous indicator of service in a combat zone. This variable does not reach statistical significance, suggesting that serving in such a zone does not alter the odds of entry into marriage. The remaining control variables are introduced in Model 3. Net of these covariates, the odds of marriage are about 41% lower prior to enlistment, and 32% lower as a veteran (marginally significant; p-value = 0.06). When only service members are considered, Blacks do not experience significantly different odds of marriage than Whites. Hispanic men who enlisted between 1997 and 2011, however, experience odds of marriage that are about 52% greater than those of Whites were enlisted during the same period. Aside from age and Hispanic ethnicity, having 4 or more years of college experience is the only control in Model 3 that significantly influences the odds of entry into marriage among the subsample of men who served between 1997 and 2011.

Concerning the predictions, results from Table 2 support my expectation that men on active duty will be more likely to marry than their civilian counterparts. The effect of active military service on the odds of marriage is significantly positive for each racial/ethnic status considered in this study. My prediction that there will be no racial/ethnic marriage gap among those who enlist is partially supported. Enlisted African American and White men do not experience statistically different odds of marriage, whereas Hispanic enlistees are marginally more likely to marry than Blacks and significantly more likely to marry than Whites. My third prediction that veterans will be less likely to enter into a first marriage than men on active duty is
also partially supported through these analyses, as those with veteran status experienced odds of marriage that were marginally lower than those currently serving. Finally, service in a combat zone does not significantly alter the odds of entry into marriage, providing no support for my fourth prediction.

**Discussion**

Prior research finds that military service was positively associated with entry into marriage among the first generations of the All-Volunteer Force. The event history analytical approach used to examine this relationship among later cohorts of service members provides evidence that military service continues to increase the likelihood of marriage, and accelerates entry into such a union. In a contemporary context where marriage is restricted to those with the economic means to enter the institution (Cherlin, 2004), and where young adults experience greater difficulty in attaining financial independence than prior generations (Sironi and Furstenberg, 2012), these results indicate that enlistment in the armed forces is a pathway conducive to transitioning to adulthood for current cohorts of young men.

Consistent with prior work (e.g. Lundquist, 2004), the analyses conducted in the present study also indicate that the military remains an environment where the marriage gap between Whites and Blacks is nonexistent. However, the current study extends prior research on the marriage gap in the armed forces by considering Hispanic men. Relative to White enlistees, Hispanics on active duty experienced odds of entry into marriage that were 77% greater, despite their similar marriage behaviors to Whites in the civilian context. Taken together, the results support the notion that military service can “springboard” racial/ethnic minorities to increased levels of entry into marriage, when compared to Whites. Civilian Blacks, for example, experience lower odds of marriage than civilians Whites, but in the context of the military,
Blacks and Whites experience similar odds of entering a marital union. Hispanics, on the other hand, have similar marriage patterns to those of Whites as civilians, but in the military, the odds of entry into marriage among Hispanics surpass those of Whites.

The increased odds of marriage experienced by young men who enlisted are most relevant during periods of active duty. Young men who enlisted between 1997 and 2011 experienced significantly lower odds of marriage both before and after their service. With the exception of Hispanic ethnicity and age, none of the socioeconomic and demographic factors that significantly influenced the odds of marriage among the sample of enlistees and civilians (e.g. income in the previous year and residence in the South) altered the likelihood of marriage among the subsample of only men who served. Such a finding could reflect egalitarian treatment of recruits by the institution, regardless of prior characteristics that may contribute to disadvantaged outcomes in a civilian context. For this reason, the military is a pathways to adulthood that is most salient among men from racial/ethnic minority groups, who have traditionally been overrepresented as a vulnerable population (Osgood, Foster, & Courtney, 2010). The high prevalence of Blacks, and the growing population of Hispanics, on active duty is indicative that young men holding minority group statuses take advantage of the opportunities provided by enlisting, and achieve certain markers of adulthood (e.g. obtaining employment, financial independence, and forming a union) more quickly than their civilian counterparts (Parker, Cilluffo, & Stepler, 2017).

Increased odds of entry into marriage experienced by active duty service men has implications for other markers of adulthood, such as family formation. Through their analysis of young women in the military during the early 1980s, Lundquist & Smith (2005) find that service women were more likely to have a child during their first three years of enlisting than
comparable civilian women. The authors point to earlier marriage, and higher rates of marriage, among female enlistees as an explanation for this trend. Analyses of those who enlisted twenty years later, however, reveals the opposite. Men and women on active duty during the early 2000s experienced significantly less childbearing than civilians. This effect was especially strong among female enlistees, and persisted after service members transitioned to veteran status (Teachman, Tedrow, & Anderson, 2015). As highlighted by prior literature, the historical era in which one serves may be source for these opposing results concerning enlistment and childbearing. Paired with the findings of the present study however, these findings suggest that military enlistment after the turn of the 21st century appears to be conducive to the some aspects of family formation, but not others.

Future studies regarding the influence of military service on marriage behaviors should consider expanding research in several ways. One avenue for future literature is to examine the ways in which the presented findings are relevant among the population of female service members. In 2011, about 15% of those on active duty were women (Clever & Segal, 2013). However the present study is unable to consider young adult women who enlisted due to an insufficient sample size. Additionally, the present study does not consider spousal characteristics. Examining the relationship between military enlistment and the risk of a first marriage, while controlling for the partner’s traits, would contribute to a more complete understanding of the relationship between military service and marriage established in the current and previous literature.

Another avenue for future research is to consider the specific factors that increase the odds of marriage among service men. Military service offers enlistees a variety of assets that are linked to marriage, such as employment, benefits (e.g. housing and health insurance), and a
steady income. I expect all of these factors mediate the positive relationship between active duty and the risk of marriage, but the present study does not determine which assets contribute the most to service member’s increased risk of marriage. Additionally, attitudes towards family formation should be considered by subsequent studies. Data limitation prevented including these attitudes in the current research, but analyses incorporating measures of marital views and intendedness to marry would help to further explain the mechanisms surrounding the findings presented here. Determining which of these factors (e.g. different types of benefits, attitudes) are most salient in the association between military service and marriage would also provide policy-makers more insights to ways of influencing marriage patterns among non-military populations.

Finally, future research should consider the role of cohabitation. Prior literature highlights the growing presence of premarital cohabitation and its influence on men and women’s decisions to marry. Although many cohabiting unions end in dissolution, cohabitation is positively associated with entry into marriage among those from advantaged backgrounds (Lichter, Qian & Mellott, 2006; Manning & Smock, 1995; Oppenheimer, 2003). Lemmon and colleagues (2009) find a positive relationship between military service and the odds that a cohabiting union will become a marital one within the following year among male enlistees, but like much of the prior research on military service and union formation, this study relies on a sample of men who transitioned to adulthood in the 1980s.

Overall, this study reinforces the claim that the military is a viable path to adulthood, especially among young men and women who do not pursue a 4-year college degree (Settersten, 2012). By addressing the gaps discussed above, policy-makers can gain a better understanding of the effective pathways to adulthood for a generation of young men and women who have found it increasingly difficult to do so.
### Tables

Table 1. Weighted Descriptive Results of Unmarried Men at Select Ages

<table>
<thead>
<tr>
<th></th>
<th>Civilians</th>
<th>Ever Enlisted</th>
<th>Total Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Age 18</td>
<td>Age 25</td>
<td>Age 18</td>
</tr>
<tr>
<td>TV Ever Married</td>
<td>0.01%</td>
<td>21.63%</td>
<td>0.36%</td>
</tr>
<tr>
<td>TV Active Military Service</td>
<td>n/a</td>
<td>n/a</td>
<td>6.49%</td>
</tr>
<tr>
<td>TV Veteran Status</td>
<td>n/a</td>
<td>n/a</td>
<td>0.00%</td>
</tr>
<tr>
<td>TI Service in a Combat Zone</td>
<td>n/a</td>
<td>n/a</td>
<td>36.30%</td>
</tr>
<tr>
<td>TI Race</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>70.20%</td>
<td>68.29%</td>
<td>73.34%</td>
</tr>
<tr>
<td>Black</td>
<td>16.15%</td>
<td>18.48%</td>
<td>13.32%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>13.65%</td>
<td>13.23%</td>
<td>13.34%</td>
</tr>
<tr>
<td>TV Education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than High School</td>
<td>61.49%</td>
<td>22.41%</td>
<td>54.91%</td>
</tr>
<tr>
<td>High School</td>
<td>37.73%</td>
<td>25.48%</td>
<td>44.05%</td>
</tr>
<tr>
<td>Some College</td>
<td>0.79%</td>
<td>23.27%</td>
<td>1.04%</td>
</tr>
<tr>
<td>4+ Years of College</td>
<td>0.00%</td>
<td>28.84%</td>
<td>0.00%</td>
</tr>
<tr>
<td>TV School Enrollment</td>
<td>64.93%</td>
<td>15.08%</td>
<td>55.62%</td>
</tr>
<tr>
<td>TI ASVAB Score</td>
<td>47119.77</td>
<td>47238.58</td>
<td>51340.5</td>
</tr>
<tr>
<td>TV Income (adjusted to 1997 dollars)</td>
<td>$2,495</td>
<td>$16,217</td>
<td>$3,222</td>
</tr>
<tr>
<td>TI Living with Both Parents in 1997</td>
<td>54.01%</td>
<td>53.07%</td>
<td>49.64%</td>
</tr>
<tr>
<td>TI Residence a Rural Area in 1997</td>
<td>28.01%</td>
<td>25.48%</td>
<td>27.86%</td>
</tr>
<tr>
<td>TV Residence in the South in 1997</td>
<td>33.31%</td>
<td>32.77%</td>
<td>37.01%</td>
</tr>
</tbody>
</table>

Unweighted N (Unmarried Men) 3,326 2,666 354 186 3,680 2,852

Source: National Longitudinal Survey of Youth 1997

Note: TV = Time Variant; TI = Time Invariant; All estimates are weighted

*significantly different from same aged civilians at p<0.05 level
Table 2. Odds Ratios from Discrete-Time Logistic Regression Models of Entry into Marriage

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active Military Service</td>
<td>2.74 ***</td>
<td>2.44 ***</td>
<td>2.14 ***</td>
</tr>
<tr>
<td>Race/Ethnicity (ref. = White)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>0.61 ***</td>
<td>0.59 ***</td>
<td></td>
</tr>
<tr>
<td>Hispanic</td>
<td>0.99</td>
<td>0.94</td>
<td></td>
</tr>
<tr>
<td>Education (ref. = High School)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than High School</td>
<td>0.93</td>
<td>0.94</td>
<td></td>
</tr>
<tr>
<td>Some College</td>
<td>1.08</td>
<td>1.09</td>
<td></td>
</tr>
<tr>
<td>4+ Years of College</td>
<td>1.18</td>
<td>1.18</td>
<td></td>
</tr>
<tr>
<td>School Enrollment</td>
<td>0.59 ***</td>
<td>0.59 ***</td>
<td></td>
</tr>
<tr>
<td>ASVAB</td>
<td>0.99 ***</td>
<td>0.99</td>
<td></td>
</tr>
<tr>
<td>Income/1000</td>
<td>1.02 ***</td>
<td>1.02 ***</td>
<td></td>
</tr>
<tr>
<td>Living with Both Parents in 1997</td>
<td>1.04</td>
<td>1.04</td>
<td></td>
</tr>
<tr>
<td>Residence a Rural Area in 1997</td>
<td>1.23 **</td>
<td>1.23 *</td>
<td></td>
</tr>
<tr>
<td>Residence in the South in 1997</td>
<td>1.17 *</td>
<td>1.17 *</td>
<td></td>
</tr>
<tr>
<td>AMS*Black</td>
<td></td>
<td></td>
<td>1.59</td>
</tr>
<tr>
<td>AMS*Hispanic</td>
<td></td>
<td></td>
<td>1.89 *</td>
</tr>
<tr>
<td>Age in Months</td>
<td>1.10 ***</td>
<td>1.08 ***</td>
<td>1.08 ***</td>
</tr>
<tr>
<td>Age in Months Squared</td>
<td>0.99 ***</td>
<td>0.99 ***</td>
<td>0.99 ***</td>
</tr>
<tr>
<td>Constant</td>
<td>0.00 ***</td>
<td>0.00 ***</td>
<td>0.00 ***</td>
</tr>
</tbody>
</table>

Unweighted N = 414,573 person-months
Source: National Longitudinal Survey of Youth 1997
AMS = Active Military Service
*p<0.05; **p<0.01; ***p<0.001
Table 3. Odds Ratios from Discrete-Time Logistic Regression Models of Entry into Marriage among Men who Enlisted between 1997 and 2011

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Military Service Sequence (ref. = AMS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Before Service</td>
<td>0.59 *</td>
<td>0.58 *</td>
<td>0.59 *</td>
</tr>
<tr>
<td>Veteran Status</td>
<td>0.67 *</td>
<td>0.67 *</td>
<td>0.68 †</td>
</tr>
<tr>
<td>Service in a Combat Zone</td>
<td>0.98</td>
<td>1.01</td>
<td></td>
</tr>
<tr>
<td>Race (ref. = White)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>0.86</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hispanic</td>
<td>1.52 *</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education (ref. = High School)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than High School</td>
<td>1.11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Some College</td>
<td>1.45 †</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4+ Years of College</td>
<td>1.73 *</td>
<td></td>
<td></td>
</tr>
<tr>
<td>School Enrollment</td>
<td>0.71 †</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ASVAB</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income/1000</td>
<td>1.01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Living with Both Parents in 1997</td>
<td>0.89</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residence a Rural Area in 1997</td>
<td>0.96</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residence in the South in 1997</td>
<td>1.22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age in Months</td>
<td>1.15 ***</td>
<td>1.14 ***</td>
<td>1.13 **</td>
</tr>
<tr>
<td>Age in Months Squared</td>
<td>0.99 ***</td>
<td>0.99 ***</td>
<td>0.99 **</td>
</tr>
<tr>
<td>Constant</td>
<td>0.00 ***</td>
<td>0.00 ***</td>
<td>0.00 ***</td>
</tr>
</tbody>
</table>

Unweighted N = 32,679 person-months
Source: National Longitudinal Survey of Youth 1997
AMS = Active Military Service
†p<0.1; *p<0.05; **p<0.01; ***p<0.001
Figures

Figure 1. Cumulative Proportion of Ever Married Men, by Race/Ethnicity and Enlistment Status
Figure 2. Effect of Military Service on the Odds of Entry into Marriage for Each Racial/Ethnic Group, Compared to Civilians

Based on Table 2, Model 3

Figure 3. Effect of Being on Active Duty on the Odds of Marriage for Whites, Blacks, and Hispanics

Based on Table 2, Model 3; Reverse Coding of Active Military Service (described on p. 16)
References


