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Pathways to the All-Volunteer Military

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Abstract

Objectives—The present study investigates the role of a disadvantaged background, the lack of social connectedness, and behavioral problems in channeling young men to the opportunities of the all-volunteer military instead of to college and the labor market.

Methods—Data from three waves of the National Longitudinal Study of Adolescent Health in the United States. The analytic sample consists of 6,938 white, black, and other males.

Results—The greatest likelihood of military service versus college and the labor force occurs when young men of at least modest ability come from disadvantaged circumstances, experience minimal connectedness to others, and report a history of adolescent fighting.

Discussion—Findings suggest the importance of access to post-high school education and worklife opportunities as a military service incentive for less advantaged young men in the all volunteer era.

INTRODUCTION

The US military became an all-volunteer force in 1973. As a consequence, it is now subject to labor market dynamics and has come to rely on the enlistment of disadvantaged young people (Segal, 1989; Moskos, Williams, and Segal, 2000). This shift to an all-volunteer force has raised questions about the circumstances and characteristics of young people that orient them to enlist — especially during wartime and military involvement abroad. The voluntary nature of contemporary military recruitment focuses inquiry on the question of why some young Americans enlist in the military instead of entering college or the labor market.

In view of the number of young Americans in the all-volunteer force (AVF; one and a half million active duty personnel; Segal and Segal, 2004), insufficient attention has been

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devoted to the determinants of enlistment in a social mobility process (but see, Kleykamp, 2006; Bachman, Segal, Freedman-Doan, and O'Malley, 2000; Kilburn and Klerman, 1999), particularly during the late 1990s and early 2000s. Available research is typically descriptive, without adequate attention to channeling mechanisms for military service, especially when they compete with options such as college (for an exception see Kleykamp, 2006).

The military has been viewed as a bridge to greater opportunity for education and career development (Browning, Lopreato, and Poston, 1973; National Research Council, 2004) among young men whose opportunities are constrained by family disadvantage and educational problems. In addition, we suggest that military service is likely to gain priority among the disadvantaged when a lack of social connectedness to family and others enhances the appeal of social bonding in the military and when behavioral problems, often stemming from life circumstances, restrict young men's chances for a positive future. We assume they make choices according to the differential accessibility of military service1, higher education, and jobs. In this paper, we seek to understand the processes leading a contemporary cohort of young men to enlist.

Data for this research come from the National Longitudinal Study of Adolescent Health (Add Health), a contemporary, school-based sample of young people. By the third wave in 2001, 691 young men (9.6% of the total sample of young men) and 209 young women (2.7% of the total sample of young women) were serving or had served in the Armed Forces. Although women are playing an increasingly important role (both in numbers and diversity of responsibilities) in the US military, the small number of enlistees and the tendency for women to enter military service under different circumstances from men (as suggested by preliminary analyses) led us to restrict this study to men only. We move beyond previous research on the enlistment of men by comprehensively examining social, economic, and behavioral predictors of military enlistment with contemporary longitudinal data that span the ages of 13 to 27.

BACKGROUND

In life course theory, the decision to enlist in the military assigns primacy to the agency of young men, their choices and actions within the constraints of life circumstances (Elder, Johnson, and Crosnoe, 2003). According to theory and evidence these choices and actions are influenced by socioeconomic origins and school achievement; by the absence and presence of social support; and by a problematic history of aggressive behavior, among other factors.

The first set of factors concerning disadvantage bears directly upon the benefit incentives of military service, with emphasis on greater access to financial support, advanced education, and skill development. The hypothesized influence of the second set of life circumstances (e.g. lack of connectedness) has much to do with the reputation and appeal of cohesive military units for young men who desire a greater sense of belonging. Lastly, the appeal of military service to young men with a record of behavioral problems comes from the military's reputation for high disciplinary standards that provides some young men with a fresh start (Eighmey, 2006; Smith, 2006).

[1]The accessibility of the military is determined in part by military standards that select out potential enlistees based on mental, moral, educational, or health factors.

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SES Dis/advantage and Under-Achievement

The benefits of military duty since World War II have identified the service as a potential path to opportunity, though veterans have generally been neglected in major studies of social mobility (Blau and Duncan, 1967; Hauser and Featherman, 1977; but see Hogan, 1978; Teachman, 2007). The All-Volunteer Force, for example, provides a wide range of benefits to members that are likely to cast military service as especially advantageous to young people from disadvantaged circumstances. Indeed the benefits have been described as a "camouflaged safety net," or a substitute welfare program (Gifford, 2006; Segal, 1989). These include housing assistance, health care, consumer subsidies, child care, and household maintenance allowances.

Other important benefits center on skill training and access to higher education, a more modest carry-over from the GI Bill in the postwar era of World War II (on GI Bill, see Mettler, 2005). These educational benefits (such as Tuition Assistance, the College Loan Repayment Program, and the new G.I. Education Enhancement Program) cover the cost of service members' college education before, during, or after their military service. Additionally, various training programs and first-hand work experiences enhance veterans' competitiveness in the civilian job market. The breadth of military benefits frequently represents better compensation than most civilian jobs (National Research Council, 2004) and may effectively promote socioeconomic advancement.

With these benefits in mind, the military has become especially accessible to young men from disadvantaged backgrounds. Studies report that entry into military service is linked to lower family income, less educated parents, and larger family sizes (Asch, Kilburn, and Klerman, 1999; Kilburn and Asch, 2003; Kilburn and Klerman, 1999). Also, African Americans, as a socially disadvantaged group, are more likely to enlist than Whites, even after taking personal characteristics into account (Bachman et al., 2000; Mare and Winship, 1984; Teachman, Call, and Segal, 1993).

Young people with lower socioeconomic origins tend to accumulate disadvantages. They are less likely than other students to do well in school, and such problems may mount in what Brewster Smith (1968, p. 277) describes as a downward cycle of causation. Failures, experienced and anticipated, make a young man "hesitant to try. What to others are challenges appear to him as threats; he becomes preoccupied with defense of his small claims on life at the expense of energies to invest in constructive coping." In this situation, successful activities, such as athletics, are likely to gain significance at the expense of school work. The immediate possibility of college weakens in this scenario, as circumstances shift in favor of the military as a path to higher education and advanced technical training.

Social Connectedness and Military Ties

The role of economic resources in military enlistment is much better understood than social psychological motivations such as social support deficits and unstable family structures. However, research indicates that such motives are certainly plausible. For instance, it is known that young people growing up in a single parent household are more likely to be poor and experience lower levels of social support thereby reducing their chances of future success (McLanahan and Sandefur, 1994). By joining the military, these young men may increase their socioeconomic opportunities and experience structure as well as support. Family disruption and conflict, as in a stepparent household, may also prompt young men to seek the military for a sense of brotherhood and the pride of mission-oriented teamwork.

Available research suggests that family structure influences the decision to enlist. Bachman and colleagues (2000) found the highest rates of post-high school military enlistment among youth from single parent families and the lowest among young people with two parents.

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However, this study only examined the number of parents (e.g., one, two, etc.) rather than specific family types (e.g., two biological parents vs. step parent family). In research on family structure and different routes of leaving home, growing up with a stepparent after age 12 is associated with marginally higher odds of joining the military and with significantly reduced odds of attending school when compared to having a stable two parent family (Goldscheider and Goldscheider, 1998). Overall, evidence suggests that young men from nontraditional families have a greater propensity to enlist in the military.

Moreover, young people who are not well integrated into family, school and community are exposed to a lack of social stability, personal control and reliable social ties. For this group, the lure of the military may be found through the availability of such relationships in its culture and routines. They are a well-known feature of military units. Beyond social support, group activities such as team sports tend to reinforce bonding and group solidarity. Participants in team sports function as members of a goal-oriented group. They learn their place in a structured social group that requires cooperation and the subordination of self interests to that of teammates. In this process, youth are socialized to find gratification in a culture that has much in common with that of the military. The presence of indirect ties to the military, as through friends in the military, should also increase the likelihood of their enlistment.

Problematic Behavior

Beyond economic and social factors, young men with a history of aggressive behaviors are more likely to have a future in the military than in school or college. In particular, physical fighting is likely to be an obstacle to young men's education and career success. However, the military may be perceived as a promising avenue for those with aggressive tendencies. It provides a structured environment where young men with behavioral problems can adapt to the discipline, social structure and responsibilities of a mission-oriented group. Therefore, some delinquent young men, whether motivated by self, peers, supervisors, or family, may join the military to transform themselves. The development of self-discipline has been cited as an enlistment goal for young people (Eighmey, 2006), although behavior correction is not a primary goal of the military. Moreover, moral waivers are occasionally granted by the military to youth with a history of serious problem behaviors that are perceived to be modifiable (e.g., not drug related). As youth mature, physical fighting becomes less age-appropriate. In these circumstances, military pathways maximize favorable opportunities and focus energies on these preferred options (Heckhausen, 1999).

DATA

We use data from three waves of the National Longitudinal Study of Adolescent Health (Add Health). Add Health is a nationally representative, school-based sample of 20,745 adolescents in grades 7–12 surveyed during the 1994–1995 academic year. The sampling frame consisted of all high schools in the United States. A total of 80 high schools were selected with probabilities proportional to size. The adolescents were interviewed three times during a 7-year period in 1994–1995, 1995–1996, and 2001–2002. The overall sample is representative of schools in the United States with respect to region of the country, urbanicity, school type (e.g., public, parochial, private non-religious, military, etc.), and school size. Members of ethnic minority groups were over-sampled. Further details regarding the sample are available at http://www.cpc.unc.edu/projects/adhealth/.

The dependent variable is measured at wave III. All independent variables are from wave I, with the exception of number of friends in the military, which comes from Waves I and II. Our sample of young men is drawn from 15,170 cases who were successfully interviewed during wave III and 187 cases who were not interviewed owing to active duty military

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(unavailable for duration). Among all sample members, young women (N=8045) were excluded from this study for reasons stated earlier (relatively small sample size and different processes leading to enlistment). In addition, 119 Native Americans were excluded because of their small sample size; 13 cases were dropped because they did not provide information on whether or not they had ever enlisted; and one case was deleted for not providing information on college attendance. Finally, 191 cases from the disabled sample and 51 cases that were still in high school in wave III were also deleted since they would not qualify for the military. Thus, the analytic sample consists of 6,938 White, Black, Asian and Hispanic men.

In addition to being nationally representative and contemporary, there are two major advantages in using Add Health for a study of enlistment. First, Add Health includes an array of social/psychological measures prior to enlistment that have not been available in previous studies of enlistment. This new information enables us to more completely study how diverse experiences lead to military service. Second, the data cover a relatively long period following high school graduation (the respondents' ages range from 18 to 27 in wave III). Previous studies have tended to focus only on enlistment behavior right after high school graduation. However, enlistment occurs at various life stages. Add Health's wider age coverage enables us to generalize findings to a broader population. As discussed below, we control on cohort (measured by school grade in Wave I) since not all of the subjects have experienced the high enlistment years of young adulthood.

MEASURES

Our dependent variable includes three categories defined according to men's military service and educational attainment. With military service as the focus, we first assigned the Add Health men to the military category if they had ever been in military service (N=691). Eighty-six percent of these study members (n=595) served full-time in active-duty forces (including 140 young men not interviewed due to active service abroad). Only 96 study members (14 percent) served in the Reserves or National Guard2.

Preliminary analysis showed no significant age difference between military and non-military respondents. However, among those who did not enlist, analysis revealed a high level of heterogeneity. To reduce heterogeneity, we divided this group into two categories according to an important distinction—their participation in post-secondary education (college enrollment). One comparison group includes men who attended college by wave III but have never served in the military (N=3,554). For purposes of convenience, we refer to this group as "college" throughout. The remainder have not pursued further education nor military service after high school (N=2,693). We refer to them as the "labor force" group because this is the primary activity of those who have never enrolled in college nor enlisted in the military. These young men are most likely either employed or seeking employment3.

In addition, we conducted sensitivity analyses beyond our main data analysis to investigate possible heterogeneity issues *within* the military group, such as whether there are notable differences between men who entered the military only and those who entered both the military and college. Between high school graduation and wave III of Add Health, 551 respondents served in the military and were interviewed in wave III; about half of these respondents (N=270) also attended college.

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[2]Exploratory regression analyses showed no significant differences in the variables included in the models in predicting active duty versus reserve status; they are therefore combined in the analyses shown.

[3]The unemployed are also in this group given that, presumably, they are looking for work. Sensitivity analyses are conducted, separating the unemployed from the labor force. The results (available upon request) indicate no difference between these two groups. That is, our predictors did not differentiate between the employed and the unemployed when compared to the military.

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In addition, we asked whether there are differences between those who joined the military as enlisted men and those who entered active duty as commissioned officers. Add Health does not have complete timing information on military service. However, from available data, we found that the military group typically entered the service *before* college. Combining information on timing and rank, which is also incomplete, we identified six respondents who entered the military after obtaining a bachelor's degree as officers. Other respondents may have entered the military as officers through ROTC and the service academies. Overall, the total number of officers in Add Health appears to be very small4. This makes detecting differences between the enlistees and officers difficult and unreliable. For the purposes of our study, we do not expect the small number of officers to significantly bias our results.

Theoretically relevant influences were grouped in distinct clusters that are consistent with the sequence of hypotheses. The first is the control variable cluster which includes qualification criteria for military service such as the Add Health picture vocabulary test (PVT; to proxy cognitive aptitude)5, body mass index (BMI; to proxy physical fitness)6, and school grade level at wave I (to control for age/cohort differences), as well as dummy variables for race/ethnicity, using Whites as the reference group.

The next cluster focuses on the first hypothesis concerning dis/advantage. The measures include the family of origin's household income, parent's education, and academic performance measured by grade point average (GPA). Socioeconomic status measures—household income and parent's education—were obtained from the Wave I survey of the young man's parent. These measures serve as a proxy for the study members' early socioeconomic environments. Household income is measured in logged thousands of dollars and includes all sources in the previous year. Parent's education represents the highest level of education achieved by either parent and is dichotomized with high school and less7 as the reference group, compared to college and above. Cumulative high school GPA is based on school transcript data in Wave III. As shown in Table 1, data are missing on some of the independent variables, especially household income and parent's education. We employed multiple imputation (MI) to account for potential bias due to missing data.

The next set of conceptually relevant influences includes family structure and social connectedness. We use a four-category variable to measure family structure – two biological parents, a biological parent and a stepparent, a single parent, and other. Three other measures supplement household structures as an index of connectedness—perceived social support, participation in team sports, and number of friends in the military. Perceived social support indicates how the study members feel about their closest social ties with family, friends, teachers, and other adults. It is a sum-score of a series of items reported by the study members. Each of these eight items include the extent to which respondents believe that significant others, including adults, teachers, parents, friends "care about them" and the extent to which the respondent feels connected to the family [scores ranging from 1 (not at all) to 5 (very much)]. A higher value indicates greater perceived social support. Involvement in team sports indicates the respondents' participation in contact sports that entail teamwork such as football, basketball, soccer, or baseball.

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[4]This may be due in large part to the relatively young age of the sample (18–26 at Wave III). At this point, the sample includes men at a time when they may be beginning college but not have completed college and moved on to become officers.

[5]We used the percentile rank score for cross-sectional analysis using Wave I data, has an advantage over the standardized score because all age groups have the same floor (0) and ceiling (100) values. Thus, the percentile rank score provides an index of relative standing among same-age peers that is comparable across age groups, which makes interpreting analysis results easier.

[6]BMI is measured according to the following formula: BMI = (Weight in Pounds/(Height in inches)*(Height in inches))*703.

[7]There are 685 cases in this category whose parents did not complete high school. However, there was no statistical difference between those with and without a high school degree in the data analysis. In the interest of parsimony, this category is combined with those who completed high school.

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Number of friends in the military represents an index of ties to the service among the respondents' friends. In both Waves I and II, the Add Health respondents were asked to identify up to three friends of each gender in the Add Health school-based sample. We identified the number of friends who had served in the military by Wave III. The military service of family members also has particular relevance to the traditional appeal of military service, but unfortunately this information is not available in the Add Health data.

Our last hypothesized pathway to the military focuses on behavioral problems, as indicated by participation in physical fights. Physical fights consist of a series of items (measured at Wave I) such as how often the respondent: 1) gets into a serious physical fight, 2) hurts someone badly enough to need bandages or care from a doctor or nurse, and 3) takes part in a fight where a group was against another group in the past 12 months. Each item is coded on a scale from 0 to 3, representing never, 1 or 2 times, 3 or 4 times, 5 or more times, respectively. The three items were then summed to measure involvement in physical fights. This index is highly correlated with self-reported juvenile delinquency in Wave I (Pearson's R=.60).

ANALYTICAL STRATEGY

Military enlistment has previously been modeled as a binary choice of enlisting versus not doing so. However, this approach does not address the substantial differences among those who have never served in the military, particularly between individuals who go to college and those who enter the work force directly following high school. The opposing characteristics of the two non-military groups may lessen the ability to observe differences. As such, analyses that distinguish between those with college from those without provide richer information on pathways to adulthood (Kilburn and Klerman, 1999; Kleykamp, 2006).

We use multinomial logistic regression to model the probability of joining the military versus being in college or in the labor force category. To offer a more intuitive interpretation of the results, we present odds ratios, which indicate the ratios of odds of enlistment as predicted by the independent variables. Ratios higher than 1.00 represent a positive association between the independent variable and enlistment, while ratios less than 1.00 indicate a negative association. We introduce each cluster sequentially in separate models, controlling for personal qualifications and race. All clusters are included in the final model to assess the net effects.

In order to investigate the heterogeneity within the military group (i.e. military enlistees with and without college education), sensitivity analyses were carried out on the final model described above. The first part of this analysis reruns this model, substituting the full military group (N=691, which includes 140 active duty men who were not interviewed in Wave III) with subsamples of the military. Specifically, we replace the full military sample with 1) military enlistees who do not have any college education (N=281), then with 2) those who entered both military and college (N=270), and finally with 3) those who entered the military as enlisted men (not officers; N=545; results not shown). The second part of our sensitivity analysis compares military enlistees without college to those who entered both the military and college.

RESULTS

The multivariate analyses shown in Table 2 display odds ratios. Model 1 presents a baseline model showing the effects of race/ethnicity and personal qualifications only. Model 2 provides a test of hypotheses about socioeconomic and educational disadvantage. Models 3 and 4 relate to our hypothesis about family disruption and social connectedness, and Model

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5 shows the effect of problem behavior that is more adaptive for military service than for advanced education. Finally, the last model displays the effects of all variables together.

We begin with the effects of race/ethnicity, adjusted for the personal qualifications of military service. Consistent with other studies, young black men are more likely to join the military than their white counterparts relative to non-college activities such as labor force participation. By comparison, Asians are less apt to enter the military than to enroll in college. No reliable, significant differences are evident for Hispanic men.

Model 2 of Table 2 shows the effects of early socioeconomic status and overall high school GPA as a test of our first hypothesis on dis/advantage.[8] Consistent with expectations, household income represents a significant antecedent of military enlistment versus college entry. For each one thousand dollar increase in household income (as logged), the odds of entering the military relative to college decrease by one-fourth (odds ratio = .74), holding all other variables constant. Well-educated parents have a similar effect on military enlistment versus college entry and labor force participation. For young men with college educated parents, the odds of enlistment are 26 percent lower than going to college, but 69 percent higher than being in the labor force group.

A high grade point average also tends to channel young men away from military service and toward college as well as toward the military versus the labor force. Overall, the results support the dis/advantage hypothesis, showing a hierarchical relationship between the three role options and SES. Young men from high socioeconomic backgrounds and with good grades are more likely to enter college than the military, and they are also more likely to choose the military over immediate entry into the labor force.

In our second hypothesis, we view the lack of social resources and support — a non-traditional family and the perceived lack of support from others — as an important source of the military's appeal to young men. These limitations make the military more attractive through its comradeship, pride of tradition and esprit de corps. In model 3, we find that men who grew up in nontraditional family structures during adolescence generally show higher odds of military enlistment than college enrollment. Young men from stepparent or "other" family structures[9] have over double the odds of going into the military versus college when compared to men from traditional two-parent households. Similarly, young men from single parent families also have a greater chance of entering the military rather than college.

Model 4 shows the effects of other measures of social connectedness. Consistent with the family structure findings, a lack of perceived social support tends to orient men towards the military rather than toward college. Each unit decrease in perceived social support is associated with a 6 percent increase in the odds of going into the military versus college. Friends in the military are also a strong predictor of military versus college entry. Each additional military friend significantly increases the odds of going into the military versus college. Taken as whole, the findings of Models 3 and 4 suggest that young men who are not socially well-connected are likely to seek fulfillment in the more regimented, coordinated activities of the military. Moreover, men with a history of fighting are significantly more likely to join the military than to enter college.

The sixth and final model shows results from a combined analysis of all clusters of independent variables examined in models 1 through 5. Compared to the earlier models, most effects remain unchanged with two notable exceptions: fighting behavior and living in

[8]This and all subsequent models control for race and personal qualifications.
[9]This includes children living with other relations including grandparents, aunts and uncles, etc., as well as respondents who were living in independent residences during high school.

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a single parent or “other” family structure during adolescence. However, regarding the first factor, additional analyses (results available upon request) show that the effects of fighting behavior in distinguishing between the military and college are still present when socioeconomic status during adolescence is controlled. These effects disappear only after academic performance (GPA) is added to the analysis, reflecting the well-established correlation between a poor academic record and behavior problems (Roeser and Eccles, 2000).

Additional analyses also show that the higher odds of enlistment associated with living in a single parent family are often due to its underlying socioeconomic disadvantages. However, growing up in a step-parent family remains significant in the final model. We suspect that this is due to a lack of cohesiveness often found in this type of household when compared to two biological-parent and single parent families (Dunn, Davies, O'Connor, and Sturgess, 2001) These circumstances may have played a significant role in motivating young men to join the military, where bonding is virtually a way of life.

Our sensitivity analysis (see Table 3) addresses the issue of heterogeneity within the military group and tests for differences between those with and without college. We expected that those with some college are more like the college group without military experience, while military men without college are apt to resemble the labor force group in terms of earlier life predictors of their activities. In the first two columns, we compare the non-college military men with the labor force and college groups. The significant effects in model 6 of Table 2 are highlighted in bold. This comparison enables us to determine whether there are significant differences when looking only at young men in the military who lack a college education. Overall, these results support those found in model 6, while also providing additional information. First, household income no longer differentiates college going from the military. Second, parent’s education and perceived social support fail to differentiate between the military and labor force only. Lastly, men who grew up in “other” family structures were much more likely to join the military than to go to college.

In the next two columns of Table 3, we compare the military *with* college to the labor force only and college groups. Again, the significant effects in model 6 of Table 2 are highlighted in bold. This analysis enables us to determine whether there are significant differences when looking only at young men in the military who have a college education. The results indicate that men from families with lower incomes had greater odds of joining both the military and college rather than of going to college alone. This supports our expectation that men from lower income strata are more likely to join the military for its educational benefits. Also, having a step parent and perceived social support do not significantly influence military going among those with college.

The last column of Table 3 shows the results of a comparison between the military with and without college. They tell us whether our variables of interest significantly distinguish college going. Overall, there are few differences between the two groups—only in terms of educational level of parents, grade point average in high school, and “other” family structures. Specifically, men in the military whose parents have at least a college degree are twice as likely to go to college. Also, increases in high school GPA are associated with increased odds of college going among military enlistees. However, those growing up in “other” family structures are more likely to only join the military. Lastly, as expected, those who are older and have had more years to experience military service and college are more likely to do both. The implications of these findings are discussed below.

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DISCUSSION

In the all-volunteer era of U.S. military service, the fulfillment of personnel needs has depended on incentives that motivate enlistment over other role options, such as college, especially during the risk-filled times of war. These incentives range from patriotic motives for national military service to a variety of personal benefits—socioeconomic, educational, and developmental (Eighmey, 2006). The opportunity for such benefits is likely to have particular appeal to young people who are relatively disadvantaged, whether in terms of family economic well-being, a stable home life, or school success, acceptance and conduct. The shift to an all-volunteer force raises questions about which segments of the population the military attracts and why.

This longitudinal study has investigated theoretically relevant correlates of young adult role options with a focus on men's military service. With data from Add Health, we examined how men who join the military differ from those who do not. The latter group is distinguished in terms of college going. We focused on young men in military service because they represent a vast majority of enlistees (approximately 85%; Segal and Segal, 2004), and the percentage of Add Health women in the military (2.7%) is too small for stable findings. However, analyses limited to men fail to account for one of the most striking changes of the military institution—the increase in number and diversity of roles for women in the Armed Forces.

Moreover, enlistment pathways to the military, like other achievement processes, are likely to differ by gender. For example, exploratory analyses indicate that parent education is not predictive of women's enlistment at all, while having friends in the military is predictive of women entering the military versus the labor force. Physical fighting is also associated with a lower likelihood of women entering the military, which is not the case for men. These gender differences in antecedents of military enlistment, coupled with the increasing importance of women in the military, highlight the need for additional studies to fully understand processes of enlistment. Large sample studies have been used to examine gender inequality in the military (Lundquist, 2008) and are needed to further investigate whether and how gender shapes enlistment decisions and barriers to military service.

Overall, an array of factors orient men to military service. Similar to findings in previous studies (Kleykamp, 2006), there is evidence of a hierarchy, with the most advantaged young people tending to go to college rather than the military, but they are also more likely to choose military service over non-college activities, like immediate post-high school entry into the labor force. For example, higher levels of parental SES diminish the appeal of military service relative to college-going, but they also increase the appeal of the military over work. This finding is consistent with prior research in which both the economically advantaged and the very disadvantaged are underrepresented in the armed forces (Bachman et al, 2000; Segal and Segal, 2004). A similar gradient applies to academic performance: young people with superior grades in high school are less likely to join the military than go to college, but they are more likely to enlist than enter the workforce. Evidence of such a hierarchy is not surprising given that the most advantaged are likely to have opportunities for college, and that the most disadvantaged are least likely to satisfy enlistment requirements due to poor health, criminal records and low scores on the Armed Forces Qualifying Test (AFQT).

Social factors play a prominent role in the decision to enlist in the military. For example, having a nontraditional family structure and low levels of social support significantly increase the appeal of the military. We argue that the military is particularly attractive to young men who have lived in a non-traditional family structure during adolescence and to

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those who lack social support because it has a reputation for camaraderie (Eighmey, 2006). In terms of family structure, the military may be appealing because strained parent-child relationships and/or feelings of social isolation lead young people in nontraditional family structures to seek independence from their families. Additional research is needed to better understand the effects of family structure. Other factors, including social ties, are also associated with enlistment. In particular, having friends in the armed forces makes it more likely that a young man will join. Family histories of military service are also likely to be important in young men's decisions to enter the military. For some, military service is a long-standing family tradition, and a rite of passage marking the transition to adulthood. Unfortunately, we lack information in Add Health on such family traditions, a topic that deserves greater attention than it has received to date.

Involvement in problem behaviors such as fights also increases the likelihood of military service over going to college. This finding is consistent with expectations based on the "transformative" reputation of the military; that it can provide a new start to those with a problematic life history. Indeed, the development of self-discipline and the chance for a new start appear as motivations for military enlistment (Eighmey, 2006; Lawrence and Legree, 1996). The military's high standards for discipline and compliance with orders create an environment that is effective in correcting behaviors (Smith, 2006). Basic training builds a unified military unit out of individualistic recruits with diverse backgrounds. A history of physical fighting during adolescence has important implications for military service that we plan to study using data from Wave IV.

This study extends previous research on enlistment in the all-volunteer force in several ways. First, Add Health provides nationally representative, longitudinal data that spans a 7-year period, reaching young people from ages 13 to 27 across its three waves of data collection. Because enlistees typically enter the military within a year after high school, and officers tend to do so after completing college (Segal and Segal, 2004), panel data that span the transition from adolescence (wave I, pre-enlistment characteristics) to adulthood (wave III, primary post high-school activities) facilitates study of the determinants of enlistment. Longitudinal data enable us to link early life (adolescent) experiences and circumstances to later life (post-high school) activities.

Second, this study uses a life course framework for examining how social and psychological factors influence military service in the 21st century. A key assumption here is that military service often serves as a springboard to educational and work opportunities during the transition to adulthood. Following others, we investigate the military option in relation to other options, college or non-college activities such as labor force participation, a strategy that has proved effective in recent studies (such as Kleykamp, 2006; Kilburn and Klerman, 1999). By distinguishing between types of non-military roles (e.g. college student or worker), we have gained additional insight into the process by which young men select themselves into the military. Characteristics that predict military enlistment over college enrollment are not necessarily predictive of military duty versus labor force participation alone, and vice versa. However, we observed some overlapping membership across the three role options. For example, a number of men have both military and college experience. But as noted earlier, supplemental sensitivity analyses showed few differences between men with both military and college and those who joined the military only.

We have viewed the military, college, and work as potential entry roles to careers. Within the life course, entry time in the military may lead to college, work, or both after the period of active military service is over. In addition, it is important to note that young people may occupy multiple roles at the same time, though one usually has primary significance. In this study, we lacked comprehensive information on the timing and primacy of young adult

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roles. More information on life circumstances surrounding the decision to join the military, especially the timing of enlistment relative to engagement in other young adult roles, could help to clarify motivation for military service.

This study is based on individual-level antecedents of military service, but analyses of contextual effects, from neighborhood to secondary school and community, did not alter our findings. Neighborhood income level, crime rate and social composition are all plausible influences on the enlistment decision. However they were not predictive of military service with individual factors controlled. In addition, we also examined the urban-rural distinction and found it not predictive of enlistment. Nonetheless, certain contexts, such as proximity to a military base (Kleykamp, 2006) do influence this preference, and friends in the military may be a key mechanism.

How do military experiences in early adulthood affect life chances and well-being in later-life? Increasingly, social scientists are investigating the consequences of military service and combat experiences. Future waves of Add Health data will enable investigators to examine the short- and long-term implications of military service for the work life and health of recent cohorts of veterans and their families. That said, it is important to note that selection processes on the part of the military and the individual constitute a major challenge for research that aims to isolate the enduring effects of military service (see MacLean and Elder, 2007). In addition to the physical and mental qualifications for enlistment, a host of individual factors and circumstances influence the likelihood of joining the military, as documented by this study.

Findings from this study suggest that in a volunteer era, young people are planful as they weigh the advantages and disadvantages of joining the military versus going to college or entering the workforce. The transition to military service in early adulthood entails both costs and benefits. The costs include a mandatory commitment and the risk of injury or death; the benefits consist of a steady income, housing, health care, skill training, and support for advanced education. Also relevant are the benefits of social support, counsel on life's decisions, and lifelong social ties.

The study also shows that enlistment decisions are made within a context of economic, familial, and personal factors. The factors that shape decisions to serve in the Armed Forces are also known to vary across historical eras (MacLean and Elder, 2007), particularly in times of peace and war, consistent with the life course principle that individual lives are embedded and shaped by their historical times and places. In this respect, it is important to note that most of the study members who report being in the military joined prior to the September 11, 2001 attacks and the subsequent U.S. wars in the Middle East. Future studies are needed to understand better who entered the service in the post-9/11 era, particularly as manpower demands soared.

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Table 1

Descriptive Statistics by Dependent Variable Categories (N=6,938)

	Labor Force (n=2693)			Military (n=691)			College (n=3554)				
	N	Mean/%	(St.D)	N	Mean/%	(St.D)	N	Mean/%	(St.D)	Min	Max
Race/Ethnicity											
White	1387	51.66		381	55.30		1978	55.72			
Black	628	23.39		141	20.46		665	18.73			
Asian	123	4.58		55	7.98		382	10.76			
Hispanic	547	20.37		112	16.26		525	14.79			
SES Advantage/Disadvantage											
Household Income (unit=$1,000)	2036	33.02	(25.88)	511	42.16	(28.67)	2751	55.95	(53.83)	0	999
Parents' Education (HS and Less)	1477	63.36		256	43.54		956	31.17			
Parents' Education (College+)	854	36.64		332	56.46		2111	68.83			
Academic Performance											
High School Overall GPA	1965	1.86	(0.77)	460	2.44	(0.67)	3040	2.76	(0.71)	0	4
Family Structure											
2 Biological Parents	1164	43.22		334	48.34		2265	63.73			
A Bio-parent and a Step-parent	514	19.09		155	22.43		408	11.48			
Single Parent	750	27.85		141	20.41		684	19.25			
Other	265	9.84		61	8.83		197	5.54			
Social Connectedness											
Perceived Social Support	2676	31.47	(4.99)	691	31.02	(4.75)	3547	32.23	(4.44)	3	40
Team Sports	2689	1.57	(1.12)	691	1.73	(1.13)	3554	1.82	(1.11)	0	3
# of Friends in the Military	2625	0.06	(0.32)	677	0.18	(0.59)	3504	0.06	(0.31)	0	1
Behavioral Problems											
Physical Fights	2658	1.64	(2.08)	690	1.30	(1.75)	3543	0.96	(1.59)	0	9
Personal Qualification											
Cross-sectional PVT percentile-w1	2536	39.49	(27.08)	652	55.77	(26.84)	3366	59.85	(28.20)	0	100
Body Mass Index (BMI) at Wave I	2640	23.09	(4.80)	688	22.40	(3.39)	3520	22.59	(4.21)	11.20	49.80
Grade Level at Wave I	2577	9.45	(1.62)	684	10.03	(1.47)	3517	9.73	(1.62)	7	12

Note: The ranges of continuous variables are shown in the last two columns. The ranges are calculated based on all three categories.

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Table 2

Entry to the U.S. Armed Forces by Social-Psychological Influences (N=6,938): Odds Ratios

	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6	
Military vs.	**Labor Force**	**College**	**Labor Force**	**College**	**Labor Force**	**College**	**Labor Force**	**College**	**Labor Force**	**College**	**Labor Force**	**College**
Race/Ethnicity												
White=ref	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Black	1.55*	1.42	2.12**	0.98	1.72**	1.26	1.50*	1.44	1.56*	1.38	2.09**	1.00
Asian	1.63	0.42**	1.22	0.54	1.60	0.44*	1.62	0.41**	1.65	0.42**	1.21	0.54
Hispanic	1.24	1.09	1.44	0.89	1.25	1.09	1.24	1.09	1.25	1.04	1.45	0.89
Advantage/disadvantage												
Log Household Income			1.12	0.74**							1.10	0.73**
Parents' Education (HS & Less=ref)			1.00	1.00							1.00	1.00
Parents' Education (College+)			1.69**	0.74*							1.73**	0.75*
Academic Performance												
Overall High School GPA			2.16**	0.47**							2.25**	0.52**
Family Structure												
2 Biological parents=ref					1.00	1.00					1.00	1.00
Step parent					1.12	2.45**					1.28	1.98**
Single Parent					0.75	1.44*					1.01	0.92
Other					0.64	2.21**					0.81	1.63
Social Connectedness												
Perceived Social Support							0.99	0.94**			0.97*	0.96**
Team Sports							1.27**	0.97			1.25**	1.00
Friend(s) in the Military							1.60	1.62*			1.44	1.72*
Behavioral Problems												
Physical Fights									0.96	1.16**	1.01	1.05
Personal Qualification												
PVT percentile	1.02**	0.99*	1.02**	1.00	1.02**	0.99*	1.02**	0.99**	1.02**	0.99*	1.02**	1.00

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	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6	
Military vs.	**Labor Force**	**College**	**Labor Force**	**College**	**Labor Force**	**College**	**Labor Force**	**College**	**Labor Force**	**College**	**Labor Force**	**College**
BMI	1.90**	1.81**	1.96**	1.75**	1.91**	1.79**	1.83**	1.77**	1.91**	1.78**	1.87**	1.70**
BMI Squared	0.99**	0.99**	0.99**	0.99**	0.99**	0.99**	0.99**	0.99**	0.99**	0.99**	0.99**	0.99**
School Grade	1.25**	1.11*	1.23**	1.12**	1.26**	1.11*	1.28**	1.06	1.25**	1.12**	1.25**	1.09

** p< .01;

* p<.05

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Table 3

Sensitivity Analyses Separating College and Non-College: Odds Ratios

	Military (w/o College) vs.		**Military (w/ College) vs.**		**Military (w/ College) vs.**
	Labor Force	**College**	**Labor Force**	**College**	**Military (w/o college)**
Race/Ethnicity					
White=ref	1.00	1.00	1.00	1.00	1.00
Black	**1.77**	0.84	**2.39****	1.14	1.35
Asian	0.57	0.26**	1.29	0.58	2.25
Hispanic	1.38	0.85	1.69	1.04	1.23
Advantage/disadvantage					
Log Household Income	1.17	**0.79**	0.93	**0.63****	0.79
Parents' Education (HS & Less=ref)	1.00	1.00	1.00	1.00	1.00
Parents' Education (College+)	**1.31**	**0.56****	**2.63****	**1.13**	2.00*
Academic Performance					
Overall High School GPA	**1.80****	**0.42****	**3.16****	**0.73***	1.76**
Family Structure					
2 Biological parents=ref	1.00	1.00	1.00	1.00	1.00
Step parent	1.48	**2.31****	0.90	**1.40**	0.61
Single Parent	1.26	1.15	0.70	0.64	0.56
Other	1.40	2.87**	0.43*	0.87	0.30**
Social Connectedness					
Perceived Social Support	**0.97**	**0.96***	**0.99**	**0.98**	1.02
Team Sports	**1.27****	1.02	**1.18***	0.94	0.92
Friend(s) in the Military	1.35	1.48	1.14	1.25	0.84
Behavioral Problems					
Physical Fights	1.01	1.05	1.04	1.08	1.03
Personal Qualification					
PVT percentile	**1.02****	1	**1.02****	1.00	1.00

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	Military (w/o College) vs.		Military (w/ College) vs.		Military (w/ College) vs.
	Labor Force	**College**	**Labor Force**	**College**	**Military (w/o college)**
BMI	**1.50***	**1.36**	**2.36****	**2.15****	1.58
BMI Squared	**0.99***	**0.99**	**0.98****	**0.98****	0.99
School Grade	**1.16***	1	**1.56****	1.36**	1.35**
Sample Size (N)	6528		6517		551

** p< .01;

* p<.05

Note: Bold indicates a significant coefficient in Model 6 of Table 2.

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