Military Service and Desistance from Contact with the Criminal Justice System

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ABSTRACT

Using data taken from the 1997 National Longitudinal Survey of Youth, we examine the relationship between military service and desistance from contact with the criminal justice system. Drawing on the concept of a turning point, we show that military service does not affect the risk of committing or being convicted of violent crimes, while at the same time significantly reducing the risk of committing or being convicted of non-violent crimes. We find no evidence that service in a combat zone affects criminal behavior. Our results demonstrate how participation in a large-scale institution can alter the life-course trajectories of young persons.

A central tenet of the life course perspective is the importance of turning points. A turning point is a major life event that marks a transition in the social and economic environment of an individual that can precipitate fundamental change in behavior (Elder, 1995, 1998; Sampson and Laub, 1993). Marriage, divorce, parenthood, a health crisis, a geographic move, or unemployment have all been mentioned as events with the potential to alter the life course trajectory of an individual, transitions that can affect the pattern of everyday behavior and thus subsequent socioeconomic achievement and well-being. One pattern of behavior that has received considerable attention is contact with the criminal justice system, given the negative life-course outcomes associated with having a criminal record (Bushway, 1998; Pager, 2003; Rasmusen, 1996; Sampson and Laub, 1993). Numerous researchers have outlined how different events in the life course are related to patterns of criminal activity that are tied to contact with the criminal justice system (Carlsson, 2012; Kirk, 2012; Laub and Sampson, 2003; Sampson and Laub, 1993; Uggen, 2000).

Marriage is a prime example of an event thought to decrease criminal activity (Horney, Osgood, and Marshall, 1995; Maume, Ousey, and Beaver, 2005; Sampson, Laub and Wimer, 2006).[1] Yet, this research has been criticized because marriage is an event that is more closely related to a process than a turning point (Carlsson, 2011; Maruna and Roy, 2007). Marriage, and other events such as geographic moves, employment and parenthood, do not necessarily represent crisp departures from a previous life course trajectory, making it difficult to identify

[1] We understand that contact with the criminal justice system is not synonymous with criminal behavior in that not all criminal behavior leads to contact with the criminal justice system. For the purpose of ease of exposition, however, we use these terms interchangeably.

the components of the event that are linked to desistance from crime that is separable from other, ongoing life-course processes. It can be difficult, therefore, to attribute the link between such processes and criminal behavior as the result of a turning point.[2] Indeed, as Carlsson (p. 1) argues "…turning points and desistance, as manifested in individuals' lives, are very often gradual processes…," which "…makes it difficult to capture with quantitative methods." In response to this criticism, we return to an event in the literature that more clearly possesses the potential to be a true turning point in the life course trajectory of criminal behavior: military service. Although we are not the first researchers who have posited military service as a turning point, we are the first to use longitudinal data pertaining to a contemporary cohort of young men (the National Longitudinal Study of Youth, 1997 or NLSY97).[3] We also examine a range of outcomes involving contact with the criminal justice system (arrests, being charged with a crime, and being convicted of a crime), as well as make a distinction between violent and non-violent crimes. Finally, we use a fixed-effects approach and a set of important longitudinal

[2] We are not arguing that marriage cannot be a turning point in the life course, at least for some individuals. The evidence exists to indicate that married men in particular are less likely to engage in criminal behavior (Forrest and Hay, 2011; Sampson, Laub, and Wimer, 2006). At issue are the causal mechanisms linking marriage to a reduced likelihood of criminal offending. A number of mechanisms have been suggested (see Forrest and Hay, 2011), one of which is marriage as a turning point. Our purpose here is to suggest military service as a cleaner measure of a life-course turning point.

[3] We restrict our analyses to men, recognizing that women constitute an increasingly large component of individuals who enter the military. Unfortunately, the NLSY97 data that we use does not contain a sufficient number of women entering the military to support analysis. In particular, the number of women jointly participating in criminal behavior and military service is very small.

control variables to minimize the likelihood that selection into the military, or that other consequences of military service, such as marriage and education, confound our results.

We find that military service reduces that likelihood of contact with the criminal justice system, particularly for men a history of delinquent or criminal behavior prior to their enlistment. We also find that both current military service and being a veteran are negatively linked to criminal offending. Furthermore, the effects of military service are stronger for desistance from non-violent criminal activities than for violent criminal activities.

PRIOR LITERATURE

The idea that military service may lead to a turning point in the lives of young men dates back to WWII. Although they do not link military service to specific changes in behaviors, Brontz and Wilson (1946) outline the immediate change in the circumstances of men's lives once inducted into the military. A number of other researchers have outlined the ways in which service during WWII altered the lives of the men who served, including changes in criminal behavior (Elder, 1986, 1987; Elder and Caspi, 1990; Sampson and Laub, 1996). The study by Sampson and Laub directly examined the relationship between service in WWII and criminal behavior using data originally collected by Glueck and Glueck (1950) on 1,000 delinquent and non-delinquent boys in the Boston area. They found that military service, particularly service overseas, reduced the likelihood of arrests for delinquent but not non-delinquent boys. Although suggestive, the evidence for military service as a turning point in the criminal careers of young men is weakened by the fact that the Glueck and Glueck data contain a limited set of longitudinal control variables that are linked to both military service and criminal activity such as marriage and employment. In addition, criminal behavior is limited to arrests during military service, as

well as dishonorable discharge, providing no information about the long-term effects of military service on criminal offending. Finally, the unique historical nature of military service during WWII, as well as the restricted geographic area represented in the Glueck and Glueck data, makes it difficult to extrapolate results to later points in time and other socioeconomic environments.

Another set of studies focus on the relationship between military service during the Vietnam War and criminal activity (Bouffard, 2014; Lindo and Stoecker, 2014; Wright, Carter, and Cullen, 2005).[4] Both Lindo and Stoecker and Wright et al. find that military service during Vietnam increase contact with the criminal justice system, measured as either arrests or incarceration. Bouffard finds that service during Vietnam, at least later during the war, acts to reduce contact with police. Differences between these studies may result from differences in their measures of criminal activity and the fact that each study uses a different, geographically-limited data base. In addition, none of the studies were able to implement strong controls for either selection into the military or for important confounding longitudinal variables such as marriage and employment. Again, because of the unique nature of the Vietnam era, it may be difficult to extrapolate findings to the current era.

A more limited set of studies have examined the relationship between military service and contact with the criminal justice system during the All-volunteer era (AVE). Bouffard and

[4] We ignore research that focuses solely on samples of Vietnam veterans, ignoring civilians. For the most part, this research finds that combat veterans are more likely to commit violent crimes than are non-combat veterans. However, this research is unable to determine the extent to which, if any, military service alters the risk of criminal behavior relative to civilians (see Freeman and Roca, 2001; Rohlfs, 2010) .

Laub (2004) and Bouffard (2005) found that military service (a mixture of current military service and veterans) in the AVE prior to 1980 was related to an increased risk of violent criminal offending in 1979, at least for individuals with a prior history of delinquent behavior. More recently, Culp et al. (2013) found that the risk of incarceration for violent crimes increases with military service during the AVE. Once again, however, the lack of longitudinal data means that these studies of the AVE were not able to enact strong controls for selectivity or the confounding effects of longitudinal life-course variables. Moreover, the use of different outcome variables (arrest vs. incarceration) also confounds our ability to draw meaningful conclusions about the impact of military service on criminal offending.

We extend prior research in several ways. First, we use contemporary data from the NLSY97 to examine the relationship between military service and several measures of criminal behavior (arrests, charged with committing a crime, convicted of committing a crime, disaggregated by violent and non-violent crimes). The period we cover consists of the all-volunteer era (WWII and Vietnam were characterized by large numbers of draftees), making it important to control for selection into the military. We use fixed-effects modeling techniques to control for any time-constant factors linked to military service and criminal behavior, either measured or unmeasured. We also make use of the longitudinal nature of the NLSY97 data to control for important time-varying life-course statuses that covary with military service and criminal behavior.

THEORETICAL ORIENTATION

Turning points are life event that marks a transition in the social and economic environment of an individual that can precipitate fundamental change in behavior. Not all events or transitions

are turning points. Indeed, many transitions mark a different part of the life course, but do not necessarily lead to a fundamental change in behavior. They represent normal passages that are often anticipated and do not represent a break from an otherwise normal life-course trajectory. Birthdays, change of employers, buying a new home, and so on represent transitions but they may not mark fundamental changes in behavior. Of course, the definition and range of behaviors being considered will impact what is considered to be an important transition. An event may not constitute a turning point for one set of behaviors whereas at the same time it may hold substantial import for another set of behaviors. With respect to criminal behavior, Laub and Sampson (2003:149) list four criteria of a transition that support the notion of a turning point: these include "…situations that (1) knife off the past from the present; (2) provide not only supervision and monitoring but opportunities for social support and growth; (3) bring change and structure to routine activities; and (4) provide an opportunity for identity transformation."

As mentioned earlier, some transitions such as marriage have been called turning points even though the extent to which Laub and Sampson's four criteria are met may be ambiguous. Marriage, and many other transitions in the life course, is anticipated and individuals have at least indirect experience of what it entails. The general outlines of the scripts for marriage, parenthood, and employment are generally understood, even if they may be difficult to follow. We suggest that military service represents a much crisper transition that more clearly meets each of the criteria outlined by Laub and Sampson. Especially in contemporary America, few individuals have knowledge or experience with what military service entails. Military recruits are less likely to have knowledge of what their military service will entail than they may have

about other life-course transitions. With a focus on military service, we address the criteria for events constituting a turning point outlined by Laub and Sampson.

Knifing Off the Past from the Present

Military service represents a clear separation of past from present and does so in several ways. First, men who enter the military are almost always physically separated from their home environments. Their daily routines are completely disrupted, and their access to former social networks is limited (Brotz and Wilson, 1946; Kelty, et al., 2010; Sampson and Laub, 1996). Second, past behaviors and characteristics have much more constrained effects on their daily lives. With exceptions for characteristics such as intelligence and motivation, other attributes such as race and ethnicity, family background, prior criminal behavior, and a range of previous life-course experiences are rendered more or less inconsequential to their success in the military (Daula, Smith and Nord, 1990; Janowitz, 1972; Moskos and Butler, 1996). Third, because men are physically removed from their home environments and are not distinguished by strategic social and economic characteristics, they are exposed to a broader range of local, regional, and national cultures than would otherwise be the case (Kane, 2006; Lutz, 2008; Segal and Segal, 2004). Thus, the usual axes along which individuals sort themselves into homogeneous groups are less salient in the military.

As a consequence, military service fosters the development of social cohesion with relationships involving high levels of respect and mutual responsibility that are based on membership in a group with a common goal (Moelker and Van Der Kloet, 2003; Nuciari, 2003; Siebold, 2007). The interconnectedness and exchangeability of social relationships among service members creates a working and social environment that is much different from civilian

life. Again, individual characteristics become less important than group characteristics.

Providing Supervision and Monitoring for Social Support and Growth

The military provides constant supervision and monitoring of enlistees beginning in boot camp and following throughout their military career. On a large scale, perhaps only imprisonment generates closer supervision and monitoring than the military, if not social support and growth. By definition, service members are employed full time, with set hours. They are expected to report to work every scheduled workday, to be on time, and to perform effectively. In many instances, work hours exceed the normal 40 hour work week in the civilian world. In addition, all personnel in the military are evaluated for job performance at least annually and sometimes more often, especially if corrective action is needed (e.g., US Navy Personnel Command, 2014). Evaluations are mandatory, standardized, and are the basis for promotions and eligibility for reenlistment.

Service members are also tested regularly for use of illicit drugs (Department of Defense, 2012). Such tests are conducted at least annually and on a random basis. Failing a drug test in the military is a serious offense and can result in a court martial and expulsion from the military. As a consequence, drug use in the military is substantially lower than among the civilian population (Bachman et al., 1999). With respect to criminal behavior, mandatory drug testing is important given the close positive link between drug use and criminal activities (Walters, 2014).

In terms of social support and growth, everyone serving on active duty has equal opportunity for participation in an extensive social network based on membership in an all-encompassing institution. It is intentionally difficult for an individual to socially isolate

themselves while serving on active duty. Moelker and Van Der Kloet (2003) find that the social networks available to the average enlistee are significantly larger than would normally be available to their civilian counterparts. In addition, the support networks available to active duty military personnel are better prepared to provide assistance when needed because these networks are specifically designed to offer formal resources, such as counselors or therapists, in addition to informal support. Most of these resources are aimed at helping the service member and military families by providing education and resources designed to deal with stressful situations (Bourg and Segal, 1999; Moelker and Van Der Kloet, 2003; Rohall, Segal, and Segal, 1999). Members of the military generally possess a feeling of belong to a larger organization, a sense of camaraderie, and a well-defined purpose (Eighmey, 2006; Elder and Clipp, 1988).

Bringing Change and Structure to Routine Activities

The lives of service members are often very different from that of comparable civilians. Routine activities that are highly variable in the civilian world are often highly structured in the military. For example, patterns of dress and personal hygiene in the military are highly regulated. There are rules concerning appropriate uniforms, length of hair, weight, and physical fitness. Work hours are highly regimented, tasks are explicitly defined, and lines of authority are clearly delimited. Recruits learn to work in teams, value conformity to rules and structure, and accept responsibility. Indeed, it is difficult to express individuality in many of the daily routines of military life. The military also tightly controls moves between duty stations, occupations, access to health care, and promotion ladders. As a result members of the military tend to share basic values, ethics and expectations for performance (Dorn et al., 2000). As a

consequence the distinction between civilian and military life is sharp (Kelty and Segal, 2013; Kelty, Kleykamp, and Segal, 2010; Maclean et al., 2014; Morin, 2014).

Providing an Opportunity for Identity Transformation

A variety of research suggests that military service promotes positive gains in self-identity. Some changes noted among veteran are an increased sense of maturity, self-confidence, independence, self-reliance, leadership, and ability to work with others (Elder, 1986; Elder, Gimbel, and Ivie, 1991; Gade, Lakhani, and Kimmel, 1991; Laverda, Vessey, and Waters, 2006). Another body of literature has linked military service to increases in civic participation, voting and volunteering (Ellison, 1992; Leal, 1999; Nesbit and Reingold, 2011; Tiegen, 2006). Segal et al. (2001) find that military service is positively associated with trust in government.

That military service is linked to identity transformation is not unexpected given that fact that most recruits are knifed off from their previous environment, are subject to constant supervision and monitoring, and subject to a new set of routinized activities. Perhaps in no other institution are men (and women) given so much responsibility at a young age. Young service members maintain, control, and supply complex military systems such as planes, tanks, ships, communication satellites and so on. They are given the opportunity to lead other young men, sometimes into combat, and make decisions that involve substantial resources. Some decisions also place other service members in harm's way.

Overall, the evidence suggests that military service constitutes a distinct turning point in the lives of young men. Some authors have likened the military to Goffman's (1961) notion of a total institution (Caforio, 2006; Wright et al., 2013) where inmates or recruits are removed from their past lives and are given a new script to guide their behavior. With respect to criminal

behavior, military service represents a clear turning point in the lives of men by providing supervision, monitoring, and socialization in a new environment that values prosocial behavior. Criminal behavior is not tolerated in the military, and recruits are placed in an environment with viable, routine alternatives to crime.

Operating within the notion of life-course trajectories, it is necessary to separate the effect of current military service from that of being a veteran. Current military service may be thought of as a treatment where individuals are encapsulated in a total institution that acts to reduce criminal behavior. Veterans no longer live in a total institution and return to a civilian life. Most prior research does not examine the separate effects of current military service and veteran status; the focus is generally on one or the other or a mixture of the two. It is also assumed that the effects of military service are more or less permanent, and there is evidence that this assumption is warranted for a number of behaviors. As outlined by several authors (Bennett and McDonald, 2013; Burland and Lundquist, 2013; Kelty and Segal, 2013; Kleykamp, 2013; MacLean, 2013; Street and Hoffman, 2013) veterans differ from otherwise comparable civilians in terms of education, employment, income, health, and family status. These results indicate that the effects of military service are long lasting, that the turning point represented by service is one that redirects the life course from that point forward. Indeed, if effects were not long lasting, a transition would not constitute a turning point. These points lead us to our first two hypotheses:

1. *Current military service is negatively related to contact with the criminal justice system.*
2. *Veteran status is negatively related to contact with the criminal justice system.*

Although current military service and veteran status are expected to be negatively linked to criminal activities, some authors write about desistance from criminal or delinquent behavior (Bouffard, 2005; Bouffard and Laub, 2004; Maruna and Roy, 2007; Sampson and Laub, 1996). Here, the notion of desistance from crime implies a history of prior criminal behavior. That is, the negative relationship between military service and crime is particularly is likely to apply only to individuals who participated in criminal behaviors prior to military service. This represents a scope condition for the effect of military service. If an individual is not prone to committing criminal acts, military service may not alter subsequent behavior compared to comparable civilians. If however, there is evidence that an individual has a history of criminal behavior, military service, as a turning point, my lead to a lower risk of offending. This is basically the same notion that other researchers have used to argue that military service is more important to subsequent socioeconomic gains for men who are disadvantaged (in terms of race, ethnicity, education and so on) prior to entry (Browning, Lopreato, and Poston, 1973; Lopreato and Poston, 1977; Phillips et al., 1992; Xie, 1992). Accordingly, we hypothesize:

3. The negative effect of current military service or veteran status on criminal behavior is stronger for servicemen with a history of criminal or delinquent activity prior to military service.

The discussion of military service as a turning point has been centered on the idea that such service will lead service members and veterans to be less likely to engage in criminal behavior. There is one aspect of military service as a turning point that may operate in the opposite direction; specifically, combat may increase the likelihood of criminal offending. Various researchers have argued that combat and the mental and emotional problems associated with it (e.g., PTSD and other emotional issues) increase the likelihood of engaging in

anti-social behavior (Lindo and Stoecker, 2014; Rohlfs, 2010; Wright et al., 2005). Combat may reverse the positive effects of being removed from old environments and being provided supervision, monitoring, and opportunities for positive identity development. Thus, combat experience represents another scope condition for the effects of military service on criminal offending. Accordingly, we hypothesize:

4. The negative effect of current military service and veteran status on contact with the criminal justice system is weaker for men who have been in combat.

Finally, criminal offending is a broad concept, and the effect of military service may not be uniform across all types of criminal behavior. A key distinction in the literature is between violent and non-violent crimes (Bouffard, 2005; Culp et al, 2011; Lindo and Stoecker, 2014; Rohlfs, 2010), with some researchers finding that service members and veterans are more likely to engage in violent crimes than non-violent crimes. The military uses violence or the threat of violence to protect American interests. Many men in the military are taught how to use weapons and engage in aggression as a means of resolving conflict, especially men who have served in combat. Some research has found that men in the military and veterans are more likely to carry firearms than comparable civilians (Hemez and Tedrow, 2014), which in turn has been linked to violent crime (Blumstein, 1995; Cook, 1983; Stolzenberg and D'Alessio, 2000). Based on these findings, we hypothesize:

5. The negative effect of military service and veteran status on contact with the criminal justice system is weaker for violent crimes than non-violent crimes.

Although we do not draw any hypotheses from the next point, it is important to note that some, if not all, of the effect of military service on criminal behavior may be due to

selection. Certainly, military recruits, especially during the AVE are not randomly selected (Bachman et al., 2000; Elder et al., 2010; Kleykamp, 2006). Recruits self-select into the military, and the military adds another layer of selectivity. In particular, men with a substantial propensity to commit criminal acts are not likely to join the military (Teachman and Tedrow, 2014), and men with criminal records are less likely to be allowed to join the military. Thus, any observed relationship between military service and criminal offending may be due to unobserved differences between service members and veterans and their civilian counterparts. To address this possibility, we use fixed-effects models to examine longitudinal data that should reduce the risk that any relationship between military service and criminal behavior is due to confounding on unobserved covariates.

DATA AND METHODS

We use data taken from the 1997 National Longitudinal Survey of Youth (NLSY-97). Starting in 1997, the NLSY-97 interviewed 8,984 young men and women between the ages of 14-16 who were born between 1980 and 1984. Follow-up interviews in the NLSY-97 are conducted annually. The respondents in our sample were eligible to be observed up to 15 times over the period 1997 to 2011 with a retention rate of 82.6% as of 2011. The NLSY-97 data are representative of the U.S. population born between 1980 and 1984.

Our analysis is based on a person-year file where respondents contribute a person year for each round of the NLSY-97 in which they were interviewed. In other words, respondents contribute person years until they are lost to follow-up or they reach the last wave of the study (2011). For example, a respondent who was interviewed in all 15 years of the survey would be represented 15 times. The final sample includes information that follows men between the

ages of 12 and 31, or the oldest age at which they were last interviewed. Person years follow the logic of life-course trajectories as they unfold over time. For example, respondents are followed as they move from civilian life, to being in the military, to being a veteran. Thus, we can examine within-person changes in criminal behavior as they occur at the same time as there are changes in military service and other important covariates. Because so few women in the NLSY97 have joined the military or have engaged in criminal behavior, we drop them from the analysis, leaving 4,599 cases from which the person-year file is created. Of these cases, 426 are men who entered the military as of 2011. If all men were followed for each of the 15 years covered in this analysis, there would be 68,985 person years. Because some men were lost to follow-up, our analysis is based on 59,019 person years. Due to the fact that some variables suffer from missing data, we use a chained-regression approach available in STATA to impute missing data (Royston and White, 2011). All analyses reported below are based on five imputed data sets.

We make use of several time-varying dependent variables measuring contact with the criminal justice system available in each round of the NLSY97. All are based on self-reports of criminal offending. The first dependent variable, arrest since the last interview, consists of responses to the following question: "Since the date of the last interview on [date of last interview], have you been arrested by the police or taken into custody for an illegal or delinquent offense (do not include arrests for minor traffic violations)?" Responses are coded 0=no, 1=yes. Respondents who were arrested were subsequently asked: "Were you charged

with an offense?" A second time-varying dependent variable, charged with a crime since the last interview, is coded 0=no, 1=yes.[5]

For each charge, respondents were then asked for what were they charged. The possible categories include: assault, including attack with a weapon or hands (battery, rape, aggravated assault, or manslaughter); robbery (taking something from someone using a weapon or force); burglary or breaking and entering (breaking into private property without permission in order to steal); theft (stealing something without use of force (auto theft, larceny, shoplifting); destruction of property (vandalism, arson, malicious destruction); other property crimes (fencing, receiving, possessing, or selling stolen property); possession or use of illicit drugs; sale or trafficking of illicit drugs; major traffic offense (driving under the influence of alcohol or other drugs, reckless driving, driving without a license); public order offense (drinking or purchasing alcohol while under the legal age, disorderly conduct, or sex offense); other offense not discussed earlier). We created two time-varying dependent variables based on these responses. The first variable is charged with a violent crime where respondents are coded 1 if they were charged with an assault, robbery, or destruction of property), 0=otherwise. The second time-varying variable is charged with a non-violent crime where 1=charged with burglary or breaking and entering, theft, other property crimes, possession or use of illicit drugs, sale or trafficking of illegal drugs, or a major traffic offense, 0=otherwise. If a

[5] Some individuals were arrested more than once. If they were not charged for any arrest, they are coded 0. If they were charged for one or more arrests, they are coded 1.

respondent was charged with more than one crime, it is possible that he was coded as being charged for both a violent and a non-violent crime. [6]

For each crime for which a respondent was charged, they were also asked whether they were convicted or pleaded guilty to the charge. Conviction of a violent crime is (assault, robbery, destruction of property) is coded as 1, 0 otherwise. Conviction of a non-violent crime (burglary or breaking and entering, theft, other property crimes, possession or use of illicit drugs, sale or trafficking of illegal drugs, or a major traffic offense) is coded 1, 0 otherwise.

Finally, we include a variable determining whether a respondent was ever incarcerated using responses to the following question: "Were you sentenced to spend time in a corrections institution, like a jail, prison or a youth institution like juvenile hall or reform school or training school or to perform community service?" Too few men were incarcerated, especially for non-violent crimes to distinguish between incarceration for violent versus non-violent crimes.

Our primary time-varying independent variables consist of two measure of military service. The first variable is an indicator of whether a respondent was serving on active duty in the interval prior the last interview (0=no, 1=yes). The second variable is an indicator of whether a respondent had left the armed forces and was a veteran as of the last interval (0=no, 1=yes). It is possible for some men to be both a veteran and currently serving on active duty, especially if a respondent left the military and reenlisted at some point in the future.

[6] For example, if a man is charged with two crimes and both crimes were not violent, then he is coded as having been charged with a non-violent crime. If both crimes are violent, he is coded as having been charged with a violent crime. If one of these crimes is violent and the other is non-violent, then he is coded as having been charged with both a violent crime and a non-violent crime.

We also code a variable indicating whether veterans or men currently serving in the military had a prior history of contact with the criminal justice system. We computed this measure by comparing dates of arrest with date of entry into the military. Men who report having been arrested prior to military service are coded 1 on this variable, 0 otherwise. About 14% of men enlisting in the military had a prior arrest history (results not shown).

Also with respect to military service, we make use of a question about combat service asked in the last three rounds of the NLSY97. This question asks all veterans and men currently serving on active duty the following: "Did you ever serve in a combat or war zone? " Note that this question does not explicitly ask whether a respondent experienced combat directly. It also does not determine the timing of service in a combat zone in the respondent's time in the service. Men who report having ever served in a combat zone are coded as 1, 0 otherwise. About 42% of the men who ever entered the military report having served in a combat zone (results not shown).

To analyze these data, we use a fixed-effects approach (discussed later). In a fixed-effects approach, fixed covariates cannot be included in the model (e.g., race, ethnicity, family background), because estimates of effects are based on change in variables from one interview to the next. Our control variables, therefore, consist of a set of time-varying measures that are potentially linked to both military service and criminal offending. All variables refer to the interval prior to the last interview. These variables include: age in months and the square of age; duration of service in months for veterans and men currently serving in the military. Two dummy variables indicating marital status; married coded 0=no, 1=yes, and cohabiting coded 0=no, 1=yes (all other marital statuses form the omitted category). A measure of the inflation-

adjusted ratio of household income to the poverty ratio for a household of the size in which the respondent live; a measure of the highest grade of education complete by the respondent; a dummy variable indicating whether the respondent was enrolled in school (0=no, 1=yes). A measure of the number of weeks worked in the civilian labor market is included, as well as a dummy variable indicating whether the respondent lived in an urban area (0=no, 1=yes), and a set of dummy variables indicating region of residence (coded 1 if the condition applies, 0 otherwise): Northeast, North Central, and South (West is the omitted category) are also included.

Statistical Model

We use a fixed-effects estimator to examine the relationship between the covariates and contact with the criminal justice system.[7] The fixed-effects model we estimate, following

[7] The decision to use a fixed-effects model is not without consequence. The most common alternative to the fixed-effects model is a random-effects model, which adjusts for the fact that there are multiple observations on individuals but assumes that the included covariates are not related to unobserved covariates. This is a strong assumption and one that appears to be incorrect in the current case. We estimated all models in our analysis using both random-effects and fixed-effects models. As shown later, the fixed-effects models indicate an effect of both current military service and veteran status for men with a prior history of delinquent or criminal behavior. The random-effects models indicate that only current military service affects criminal behavior, not veteran status. Moreover, prior delinquent or criminal behavior does not alter this relationship. The differences between the random- and fixed-effects models strongly suggest that unobserved variables tied to selectivity into military service play an important role in determining the relationship between service and subsequent criminal offending. Failure to recognize these unobserved differences leads to biased estimates of the effects of military service on criminal behavior.

Allison (1994), is of the following general form (where we use arrest as a representative dependent variable):

$ARREST_{it} = u_1Age_{it} + u_2Age_{it}^2 + \delta_1MILITARY_{it} + \delta_2VET_{it} + \delta_3DURSERVICE_{it} + \gamma W_{it} + \alpha_i + \varepsilon_{it}$

where $ARREST_{it}$ represents was arrested in interval t. The 15 possible values of t correspond to the 15 survey rounds covered in our analysis. The value of i for a given t depends upon the number of respondents who contribute an observation at that value of t. Age_{it} indicates the age of the respondent at time t (and is used to account for change in likelihood of engaging in criminal behavior associated with aging); $MILITARY_{it}$ represents a time-varying dummy variable indicating whether respondent i is currently serving in the military at time t; VET_{it} is a time-varying dummy variable indicating whether respondent i is a veteran at time t; $DURSERVICE_{it}$ is a time-varying indicator of the length of time spent in the military at time t; W_{it} represents a vector of time-varying characteristics of respondents, both nonveterans and veterans, that correspond to control variables; u_1, u_2, δ_1- δ_3, and γ are coefficients or vectors of coefficients, α_i represents unobserved and constant person-specific differences across respondents that affect schooling, and ε_{it} is a residual error term. This model is estimated using XLOGIT in STATA with a fixed-effects option. Following previous literature (Brayne, 2014), the reference category for each model we estimate is men with no contact with the police.

The model does not include any fixed (non-changing) characteristics of respondents because in the fixed-effects procedure, the effects of any constant person-specific characteristics such as race are absorbed within the person-specific factors, α_i. Thus, although covariates such as race do not appear in the model, their effects on the dependent variable are controlled (as noted later, however, interactions between fixed characteristics and time-varying

characteristics can be included in the model). Heuristically, one can imagine that the fixed-effects model is estimated by including a set of dummy variables corresponding to each of the respondents.

The value of the fixed-effects procedure is that in controlling for all person-specific factors, it controls for potential fixed sources of spuriousness associated with entry into the military and contact with the criminal justice system. The inability of prior research to make this sort of control for selectivity is a serious limitation given that entry into the military during the AVE is not random (Bachman et al., 2000; Eighmey, 2006; Elder et al., 2010; Johnson and Kaplan, 1993; Kleykamp, 2006). Transitory sources of spuriousness (those associated with unobserved changes in characteristics linked to military service) are not controlled in fixed-effects models. Yet the model does include a number of important time-varying characteristics of individuals that should help alleviate this issue (i.e., marital status, education, income, and school enrollment).

RESULTS

Descriptive Statistics

In Table 1 are shown descriptive statistics for the dependent variables used in our analyses, separately according to our major independent variables (military service). The values shown refer to person-year intervals, not individuals. Thus, for all intervals, 7.76% of intervals involved an arrest, and 5.59% of intervals involved a charge. Nearly twice as many intervals involved a charge for a non-violent crime compared to a violent crime (4.37% versus 2.37%).[8] About 4% of

[8] The summed values for violent crimes and non-violent crimes are greater than the value for crimes, because some men were charged and/or convicted of both types of crimes.

intervals involve a conviction for a crime, 1.47% for a violent crime and 2.78% for a non-violent crime. A little over 2% of intervals involve a man that was incarcerated for a crime. Comparing intervals of active military service to civilian intervals, we see that intervals involving men serving on active duty are less likely to be arrested, charged, convicted, or incarcerated for a crime. Intervals involving veterans are also less likely to be arrested, charged, convicted, or incarcerated than civilian intervals, but the differences are smaller (veterans are more likely to have been incarcerated for a crime, and this is due to the fact that they are much older than civilian intervals – see Table 2).[9]

Table 1 about Here

In Table 2 are shown descriptive statistics for the major independent variables used in the analysis, again separately by categories of military service. Nearly 3.5% of intervals involve a man serving on active duty, and 2.62% of intervals involve a veteran. Among intervals for active duty service, about 14% are associated with respondents who report having been arrested prior to enlistment. Almost a third of the intervals involve a man who served in a combat zone. For veteran intervals, about 17% involve a respondent with a prior arrest and over 45% of these intervals involve a respondent who served in a combat zone. When comparing intervals for current military service, veteran status and civilians, it is evident military service is associated with being older, married, having completed high school, and being from the South. These same intervals have a lower likelihood of being enrolled in school.

[9] Note that the sum of the number of intervals across active military service, veterans, and civilians is slightly greater than 59,019. This result occurs because a small number of veterans are also serving on active duty (e.g., men who reenlisted in the military after a period of returning to civilian life).

Table 2 about Here

Multivariate Results

In Table 3 are shown the results of fixed-effects logistic regression models predicting the log of the odds of being arrested. Two models are presented. Model 1 differs from Model 2 by not including indicators of prior arrest and service in a combat zone. The results in Model 1 indicate that net of the control variables active military service, but not veteran status, is linked to a lower risk of being arrested. Compared to civilian intervals, the odds of being arrested are $([e^{-0.615} - 1]*100) = 46\%$ lower when a respondent is serving on active duty. Thus hypothesis 1 receives support, but not hypothesis 2. After adding the controls for prior criminal or delinquent behavior and combat status (here as a set of interaction effects), only the coefficient for active-duty intervals with a prior arrest is statistically significant, indicating that odds of arrest for such intervals are nearly 56% lower compared to civilian intervals. Accordingly, hypothesis 3 is partially supported. Hypothesis 4 fails to receive support.

Table 3 about Here

Results for being charged with a crime are shown in Table 4. Not separating charges into violent versus non-violent crimes shows that both active-duty service members and veterans are less likely to be charged with a crime (Model 1). These effects are limited to service members and veterans who have a prior arrest, however (Model 2). The odds of being charged with a crime are about 89% lower for men serving on active duty and about 85% lower for veterans. It is also evident that active-duty service members who have served in a combat zone are also less likely to be charged with a crime (67% reduction in the odds). This is the only instance, however, when combat service is related to subsequent criminal behavior. A different

pattern occurs when distinguishing between charges for violent versus non-violent crimes.[10] For violent crimes, none of the indicators of military service are statistically significant. The results for non-violent crimes show that both current service members and veterans are less likely to be charged and that these effects are limited to men with a history of criminal behavior (a reduction in the odds of being charged with a non-violent crime of about 91% lower for current service members and about 69% lower for veterans). Hypothesis 5 thus receives support, at least for being charged with a crime.[11]

Table 4 about Here

Results for being convicted of a crime are shown in Table 5. In general, the results mirror those for being charged with a crime. When overall convictions are considered, both active service members (81%) and veterans (78%) with a prior arrest are less likely to be convicted. For violent crime, only the effect for veterans with a prior arrest is statistically significant, indicating a 86% reduction in the odds of being convicted. For non-violent crime, both current service members and veterans with a history of criminal behavior are less likely to be convicted (odds reduced by about 87% for current service members and about 78% for

[10] Note that men can be charged with committing both violent and violent crimes. Thus, the results do not correspond to estimating a multinomial logistic regression model where respondents can only fall into one category and not the other. The same situation characterizes the models for being convicted of a crime.

[11] We note that in no instance is military service linked to an increase in violent crime as has sometimes been found in past literature (Culp et al., 2013). Indeed, the difference between the effect of military service on violent and non-violent criminal offending is generated by the fact that the military does not have an effect on violent crimes, whereas it decreases non-violent crimes.

veterans). As was the case for being charged with a crime, hypothesis 5 receives support with respect to being convicted of a crime. None of the coefficients involving service in a combat zone are statistically significant.

Table 5 about Here

The results for incarceration (see Table 6) show that none of the effects of military service reach statistical significance. Unfortunately, due to the small number of men who were incarcerated, especially for non-violent crimes, we cannot estimate separate models for type of crime for which a respondent was incarcerated. It is also possible, however, that by the time sentencing for a crime arrives military service is irrelevant.

Table 6 about Here

Some Extensions

We have not discussed variations in the effects of military service that may occur according to important background characteristics such as race and ethnicity. A variety of research suggests that Blacks and Hispanics are more likely to benefit from military service in terms of outcomes such as education, employment, and income (Browning, Lopreato, and Poston, 1973; Lopreato and Poston, 1977; Phillips et al., 1992; Xie, 1992). Most commonly used is the notion that military serves as a bridging environment where young men from disadvantaged backgrounds can learn how to maneuver in a more advantaged environment. Our fixed-effects approach automatically controls for confounding due to the main effects of fixed variables such as race and ethnicity. The fixed-effects models, however, do not control for variations in the effects of important time-varying variables, here military service, that occur according to race and ethnicity (e.g., interaction effects). To test for the possibility that desistance from criminal

behavior may differ for Blacks and Hispanics we included a set of interaction variables involving these characteristics with our measures of military service. In no case were these interaction effects statistically significant (results not shown). We conclude, therefore, that with respect to contact with the criminal justice system, race and ethnicity do not moderate the effects of military service.

We also sought to determine whether the effects of military service on contact with the criminal justice system might vary according to when service occurred; here, before or after 9/11. Prior to 9/11, based on the history of service in the all AVE up to that time, most men who entered the military could expect not to see combat duty. After 9/11 this expectation changed, and the type of young men who entered the military may have changed with more emphasis being placed on duty and personal sacrifice to protect the homeland, rather than income and job security. To test this possibility, we interacted our measures of military service with an indicator of whether service occurred before or after 9/11. Again, we found none of these effects were statistically significant, indicating homogeneity of effects across the historical period we consider (1997-2011) (results not shown).

Finally, we sought to determine whether a different indicator of prior criminal behavior would alter our results. To do so, we constructed an indicator consisting of ten self-reported behaviors. These behaviors have been used elsewhere to examine patterns of delinquency and criminal behavior across the life-course trajectories of adolescents and young adults (Bolken et al., 2010; Hair et al., 2009; Holmes, Jones-Sanpei and Day, 2009; Vander Ven et al., 2001). The questions use are as follows: 1) Have you ever run away, that is, left home and stayed away at least overnight without your parent's prior knowledge or permission? 2) Have you ever carried

a hand gun? When we say hand gun, we mean any firearm other than a rifle or shotgun. 3) Have you ever belonged to a gang? 4) Have you ever purposely damaged or destroyed property that did not belong to you? 5) Have you ever stolen something from a store or something that did not belong to you worth less than 50 dollars? 6) Have you ever stolen something from a store, person or house, or something that did not belong to you worth 50 dollars or more including stealing a car? 7) Have you ever committed other property crimes such as fencing, receiving, possessing or selling stolen property, or cheated someone by selling them something that was worthless or worth much less than what you said it was? 8) Have you ever attacked someone with the idea of seriously hurting them or have a situation end up in a serious fight or assault of some kind? 9) Have you ever sold or helped sell marijuana (pot, grass), hashish (hash) or other hard drugs such as heroin, cocaine or LSD? 10) Have you ever been arrested by the police or taken into custody for an illegal or delinquent offense (do not include arrests for minor traffic violations)? The indicator we used is coded 1 if a respondent reported having engaged in at least one of these behaviors prior to military service, 0 otherwise. A much larger percentage of respondents (about 54%) report having engaged in one of these behaviors prior to military service compared to having been arrested (about 14%).

A positive response to any of these questions does not mean that a respondent had contact with the criminal justice system, but it may tap a broader range of individuals who may be at risk of criminal offending. Certainly, having been arrested represents a more stringent definition of prior criminal behavior and one that is more likely to render a respondent ineligible for entry into the military, especially if the arrest was for a felony. The results obtained when using this alternative indicator of prior criminal behavior largely mirror those

obtained those obtained when using prior arrest. Men with a prior history of self-reported delinquent or criminal behavior are less likely to report contact with the criminal justice system after entering the military. As might be expected given the much greater number of men who report having engaged in one of these behaviors, the size of the estimated effects is smaller, yet remains statistically significant. Thus, even if a much wider definition of criminal behavior is used, the effects of military service remain the same.

DISCUSSION

For the most part, our hypotheses are supported, at least partially; our results supporting the notion that that military service affects the risk of criminal offending. Experience in the military is negatively associated with criminal offending, and this effect is largely limited to service members who had a history of delinquent or criminal behavior prior to entering the military. In addition, desistance from crime associated with military service is mostly limited to non-violent crimes.

Our results are consistent with the notion that military service serves as a turning point in the lives of many young men. Unlike many other transitions that have been termed turning points, military service likely provides one of the sharpest contrasts between two points in an individual's the life course. The crisp distinction between civilian and military lives allows men to redefine themselves, to follow a new path, to break from their previous life. After joining the military, men are removed from their prior civilian environments, subjected to substantial supervision and monitoring, provided the structure of routinized activity, and given the chance to develop a new identity without bias associated with prior identity.

Our results are the first to show that the effects of military service include both active-duty service members and veterans. For the most part, the effects of current service are similar to those for being a veteran. Although current service members are less likely to be arrested and veterans are not, both current service members and veterans are less likely to be charged and convicted of non-violent crimes. The enduring effects of military service as evidenced by the effects of veteran status suggest the capacity of a sharp turning point to redirect a life course in the long term. Desistance from crime is not limited to the relatively brief period that men spend in the military. Rather, the sharp break from a previous life-course trajectory results in a new beginning for men who otherwise might have continued to engage in criminal behavior.

Thus, the military, designed as an institution whose primary function is to defend national security, provides an important latent function for a substantial number of young men (and potentially young women). Not only is the military a source of stable employment with excellent benefits (Segal and Segal, 2004), it represents an opportunity for service members to redefine themselves. Currently, about 7-10% of recent cohorts of young men enter the military, making it the single largest employer of men age 18-25. The reach of the military in terms of the number of lives it touches is therefore substantial. From the perspective of public policy, the military can provide a template for resetting the lives of young Americans who might otherwise continue to engage in troubled behaviors. It represents a large-scale institutional intervention that appears to successfully encourage desistance from criminal behavior.

Our study is the first to focus on military service that primarily occurred in the twenty-first century. It is also the first study to examine longitudinal data over multiple periods of time

to assess the impact of military service on criminal involvement. Accordingly, a strength of our approach is our ability to use fixed-effects models for ascertaining the effects of military service. The use of such models allows us to minimize the risk that our results are due to the selectivity of men who join the military. Any observed or unobserved characteristics of men linked to military service and criminal behavior are controlled in our models. Of course, time-varying sources of selectivity may still bias our results, although we control for a range of such variables that may confound the relationship between military service and crime. We are also able to look at a variety of outcomes, including being arrest, charged, and convicted of a crime. Perhaps more important, we are able to distinguish between violent and non-violent crimes.

Like any other study on the topic, our research suffers from a number of weaknesses. First, our data are limited in historical time and refer to a limited cohort of men born between 1980 and 1984. Results may differ for different cohorts of men. Indeed, previous research has amply demonstrated that the nature of military service and its impact on service members has changed across time (Wilmoth and London, 2013). Second, we have used self-reports of contact with the criminal justice system. If self-reporting of criminal behavior varies according to military service, our results represent biased estimates of the effect of military service on criminal offending. Third, our results refer to a limited portion of the life course. We cannot make any assertions about the relationship between military service and criminal behavior beyond about age 30. It is possible that the effects of military service in the twenty-first century change at older ages.

Finally, we recognize that some of our measures are somewhat crude. Our measure of combat is limited to service in a combat zone and not to combat itself. This limitation may be

one reason why we failed to find any relationship between combat and contact with the criminal justice system. This finding is not consistent with prior research, and we suspect that a more refined measure of combat involvement would support prior research that illustrates a relationship between combat and criminal involvement. Furthermore, despite our ability to separate violent from non-violent criminal behaviors, we cannot pinpoint where military service may have its most substantial effect. For example, prior research has shown that service members and veterans are more likely to be involved in intimate partner violence than civilians (Jones, 2012; Marshall, Panuzio, and Taft, 2005). It may be the case that the reason that military service provides more desistance from crime for violent crimes than non-violent crimes is due to the greater risk of men with military service being arrested for domestic violence. Unfortunately, the data available in the NLSY97 are sufficiently refined to make such a distinction between types of violent crimes.

CONCLUSION

We have demonstrated that military service can act as a turning point in the criminal histories of young men. Young men with a prior history of delinquent or criminal behavior are led to desist from contact with the criminal justice system both during and after military service, particularly for non-violent crimes. Our results suggest the ability of a large-scale institution to alter the life-course patterns of young men (and possibly young women). In an important social arena, criminal behavior, life-course trajectories can be altered. The juxtaposition of military service and criminal behavior at those ages when young lives are being formed provides the opportunity for lifelong change. As with other research that demonstrates the linkages

between military service and various life-course outcomes, a turning point can indeed exist and represents a key concept in life-course research.

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Table 1 Descriptive Statistics for Dependent Measures of Contact with the Criminal Justice System

Variable	All Intervals	Active Military Service	Veteran	Not Active Military Service & Not Veteran
Arrested	7.76	3.18	5.87	7.99
Charged	5.59	1.93	4.47	5.75
Violent Crime	2.37	0.54	1.36	2.45
Non-violent Crime	4.37	1.58	3.30	4.49
Convicted	4.03	1.33	3.58	4.13
Violent Crime	1.47	0.35	0.71	1.53
Non-violent Crime	2.78	0.89	1.88	2.87
Incarcerated	2.29	0.40	3.13	2.33
Number of Intervals	59,019	2,024	1,545	55,570

Note: Values based on person-year intervals. All values shown are percentages.

Table 2 Descriptive Statistics for Covariates Associated with Contact with the Criminal Justice System

Variable	All Intervals	Active Military Service	Veteran	Not Active Military Service & Not Veteran
Active Military Service	3.43	100.00		
Prior Arrest		13.64		
Combat Zone		32.46		
Cumulative Service (Months)		13.57		
Veteran	2.62	5.92	100.00	
Prior Arrest			17.35	
Combat Zone			46.73	
Duration of Service (Months)			45.12	
Age (months)	265.43	287.48	321.25	263.18
Married	12.58	37.23	35.36	11.13
Cohabiting	11.06	5.42	15.61	11.13
Household Poverty Ratio	3.38	3.47	3.82	3.37
Highest Grade Completed	11.63	12.68	12.89	11.56
Enrolled in School	40.17	19.43	22.93	41.38
Weeks Worked	30.44	7.17	38.13	31.05
Urban	78.14	78.44	82.22	78.02
Northeast	16.73	10.95	16.66	16.94
North Central	22.45	14.55	20.09	22.81
South	38.58	49.24	44.20	38.04

Note: Values based on person-year intervals. Values shown are percentages for nominal variables and means for interval variables.

Table 3 Fixed Effects Estimates on the Log of the Odds of being Arrested

Variable	Fixed Effects Estimates	
	Model 1	Model 2
Active Military Service	-0.615**	-0.295
Veteran	-0.367	-0.354
Active Duty * Prior Arrest		-0.822**
Veteran * Prior Arrest		-0.059
Active Duty * Combat Zone		-0.513
Veteran * Combat Zone		0.169
Cumulative Duration of Service	-0.001	-0.001
Duration of Service for Vets	1.824*	0.122
Age in Months	0.031**	0.031**
Age Squared *100	-0.003**	-0.007**
Married	-0.852**	-0.853**
Cohabiting	-0.393**	-0.390**
Household Poverty Ratio	0.016	0.016
Highest Grade Achieved	0.167	0.016
Enrolled	-0.261**	-0.262**
Weeks Worked	-0.009**	-0.009**
Urban	-0.027	-0.025
Northeast	-0.816**	-0.809**
North Central	-0.187	-0.184
South	-0.588**	-0.580**

**p<.05

*p<.10

Table 4 Fixed Effects Estimates on the Log of the Odds of being Charged with a Crime

Variable	Fixed Effects Estimates					
	Charged with a Crime		Charged with Violent Crime		Charged with Non-violent Crime	
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
Active Military Service	-0.980**	- 0.030	-0.714*	0.062	-1.011**	-0.075
Veteran	-1.037**	-0.161	-0.529	0.260	-1.196**	-0.450
Active Duty * Prior Arrest		-2.215**		-0.280		-2.414**
Veteran * Prior Arrest		-1.885**		-1.569		-1.165**
Active Duty * Combat Zone		-1.096**		-1.700		-0.282
Veteran * Combat Zone		-0.102		- 0.531		0.353
Cumulative Duration of Service	-0.002	-0.002	-0.009	-0.005	-0.001	-0.002
Duration of Service for Vets	3.192**	-0.002**	0.984	0.197	3.204**	0.208
Age in Months	0.036**	0.036**	0.002	0.018	0.040**	0.072**
Age Squared * 100	-0.002**	-0.007*	-0.002*	-0.004*	-0.008**	-0.001**
Married	-0.772**	-0.780**	-0.845**	-1.124**	-0.574**	-0.619**
Cohabiting	-0.363**	-0.364**	-0.303**	-0.247	-0.338**	-0.320**
Household Poverty Ratio	0.011	0.129	-0.035	-0.068**	0.029*	0.032*
Highest Grade Achieved	0.060**	0.060**	0.143**	0.131**	0.033	0.010
Enrolled	-0.940**	-0.345**	-0.189**	-0.113**	-0.343**	-0.436**
Weeks Worked	-0.010**	-0.010**	-0.006**	-0.007**	-0.009**	-0.010**
Urban	-0.023	-0.225	0.038	-0.124	0.029	-0.070
Northeast	-0.428	-0.364	0.224	0.658	-0.484*	-0.642
North Central	-0.102	-0.092	0.006	0.588	-0.289	-0.280
South	-0.472**	-0.432**	-0.098	0.589	-0.653**	-0.682**

**p<.05

*p<.10

Table 5 Fixed Effects Estimates on the Log of the Odds of Conviction

Variable	Fixed Effects Estimates					
	Convicted of a Crime		Convicted of Violent Crime		Convicted of Non-violent Crime	
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
Active Military Service	-1.190**	-0.460	-1.094*	-0.219	-0.996**	-0.162
Veteran	-0.507	0.217	-0.468	0.571	-0.881*	-0.188
Active Duty * Prior Arrest		-1.682**		-1.270		-2.061**
Veteran * Prior Arrest		-1.507**		-1.996**		-1.500**
Active Duty * Combat Zone		-0.447		-1.362		-0.379
Veteran * Combat Zone		-0.229		-0.943		0.042
Cumulative Duration of Service	-0.002	-0.002	-0.007	-0.007	-0.003	-0.003
Duration of Service for Vets	1.620	0.117	0.252	0.062	2.268	0.159
Age in Months	0.051**	0.050**	0.022**	0.022**	0.044**	0.044**
Age Squared * 100	-0.006**	-0.009**	-0.007**	-0.007**	-0.009**	-0.009**
Married	-0.813**	-0.829**	-0.600**	-0.629**	-0.757**	-0.765**
Cohabiting	-0.359**	-0.352**	-0.399**	-0.403**	-0.311**	-0.310**
Household Poverty Ratio	0.019	0.020	-0.049*	0.050*	0.035*	-0.037*
Highest Grade Completed	0.075**	0.074**	0.153**	0.153**	0.054*	0.056*
Enrolled	-0.436**	-0.409**	-0.311**	-0.314**	-0.472**	-0.479**
Weeks Worked	-0.014**	-0.013**	-0.011**	-0.011**	-0.011**	-0.011**
Urban	-0.078	-0.073	-0.067	-0.071	-0.061	-0.058
Northeast	-0.069	0.065	0.402	-0.468	0.016	0.079
North Central	0.151	0.104	-0.136	0.133	-0.201	-0.205
South	-0.201	-0.133	-0.115	-0.102	-0.374	-0.334

**p<.05

*p<.10

Table 6 Fixed Effects Estimates on the Logs of the Odds of Incarceration

Variable	Fixed Effects Estimates	
	Model 1	Model 2
Active Duty	0.589	0.521
Veteran	1.186	0.661
Active Duty * Prior Arrest		-0.670
Veteran * Prior Arrest		0.811
Active Duty * Combat Zone		0.480
Veteran * Combat Zone		-0.123
Cumulative Duration of Service	-0.011**	-0.010*
Duration of Service for Vets	0.018	0.179
Age in Months	0.261**	0.261**
Age Squared *100	-0.004**	-0.004**
Married	-1.205**	-1.206**
Cohabiting	-0.221**	-0.221**
Household Poverty Ratio	0.022	0.013
Highest Grade Achieved	-0.013	-0.034
Enrolled	-0.676**	-0.676**
Weeks Worked	-0.020**	-0.020**
Urban	-0.257**	-0.254**
Northeast	0.068	0.080
North Central	-0.114	-0.147
South	-0.273	-0.259

**p<.05

*p<.10