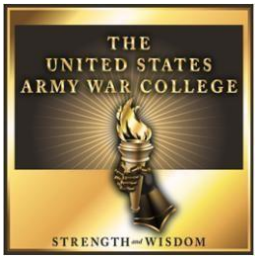
Strategy Research Project

Suicide Rates in the Army: A Function of Policy?

by

Colonel Aaron B. Sander
United States Army

Under the Direction of:
Professor John M. Tisson



United States Army War College
Class of 2017

REPORT DOCUMENTATION PAGE

Form Approved--OMB No. 0704-0188

1. REPORT DATE *(DD-MM-YYYY)*	**2. REPORT TYPE**	**3. DATES COVERED** *(From - To)*
01-04-2017	STRATEGY RESEARCH PROJECT	

4. TITLE AND SUBTITLE
Suicide Rates in the Army: A Function of Policy?

5a. CONTRACT NUMBER

5b. GRANT NUMBER

5c. PROGRAM ELEMENT NUMBER

6. AUTHOR(S)
Colonel Aaron B. Sander
United States Army

5d. PROJECT NUMBER

5e. TASK NUMBER

5f. WORK UNIT NUMBER

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)
Professor John M. Tisson

8. PERFORMING ORGANIZATION REPORT NUMBER

9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)
U.S. Army War College, 122 Forbes Avenue, Carlisle, PA 17013

10. SPONSOR/MONITOR'S ACRONYM(S)

11. SPONSOR/MONITOR'S REPORT NUMBER(S)

12. DISTRIBUTION / AVAILABILITY STATEMENT Distribution A: Approved for Public Release. Distribution is Unlimited.
To the best of my knowledge this SRP accurately depicts USG and/or DoD policy & contains no classified information or aggregation of information that poses an operations security risk. **Author:** ☒ **PA:** ☒

13. SUPPLEMENTARY NOTES
Word Count: 5505

14. ABSTRACT

The suicide rate in the Army was below the national average in 2001 but had risen sharply by 2008, more than doubling within the institution, and have remained at that level ever since. This paper explores why differences in Service suicide rates exist, and then uses that analysis to make recommendations for Army policy and future studies that may mitigate the alarming and increasing trend of Soldier suicide. Recommendations include placing suicide prevention with the Army medical community that better understands its causation; reviewing the necessity to enlist convicted criminals into the Army; to review the current policy of promoting Soldiers into leadership positions or separating them; to capture the entire legal history of Soldiers who attempt or complete Soldier suicide to conclude whether or not to continue granting criminal waivers to new recruits; and to more closely examine the phenomenon of trauma, particularly interpersonal trauma, as it relates to suicide. In the final analysis, we cannot presently conclude that Army suicide rates are a function of Army policy because the granularity of data needed does not exist.

15. SUBJECT TERMS
Prevention, Criminal Waivers, Promotion, Interpersonal Trauma, Substance Abuse, Repression, Amnesia, Denial

16. SECURITY CLASSIFICATION OF:			**17. LIMITATION OF ABSTRACT**	**18. NUMBER OF PAGES**	**19a. NAME OF RESPONSIBLE PERSON**
a. REPORT	**b. ABSTRACT**	**c. THIS PAGE**			**19b. TELEPHONE NUMBER** *(w/ area code)*
UU	UU	UU	UU	26	

Suicide Rates in the Army: A Function of Policy?

(5505 words)

Abstract

The suicide rate in the Army was below the national average in 2001 but had risen sharply by 2008, more than doubling within the institution, and have remained at that level ever since. This paper explores why differences in Service suicide rates exist, and then uses that analysis to make recommendations for Army policy and future studies that may mitigate the alarming and increasing trend of Soldier suicide. Recommendations include placing suicide prevention with the Army medical community that better understands its causation; reviewing the necessity to enlist convicted criminals into the Army; to review the current policy of promoting Soldiers into leadership positions or separating them; to capture the entire legal history of Soldiers who attempt or complete Soldier suicide to conclude whether or not to continue granting criminal waivers to new recruits; and to more closely examine the phenomenon of trauma, particularly interpersonal trauma, as it relates to suicide. In the final analysis, we cannot presently conclude that Army suicide rates are a function of Army policy because the granularity of data needed does not exist.

Suicide Rates in the Army: A Function of Policy?

Historically, suicide rates in the Army have been lower than United States (U.S.) civilian rates, but in 2004 during combat operations in both Iraq and Afghanistan, Army suicide rates began trending upward.[1] While U.S. national suicide rates in 2001 (10.7 per 100,000 person years (PY)) remained virtually unchanged in 2006 (11.1 per 100,000 PY), the suicide rate in the Army was below the national average in 2001 (9.0 per 100,000 PY) but had risen sharply by 2008 (19.3 per 100,000 PY), or more than doubling within the institution, and have remained at that level ever since.[2] Interestingly, suicide rates in the Marine Corps also rose during that timeframe from 2001 (16.7 per 100,000 PY) to 2008 (19.9 per 100,000 PY) while suicide rates in the Navy and Air Force remained relatively steady.[3] This paper explores why these differences in Service suicide rates exist using related studies that the Department of the Army and others are conducting or have recently completed, and then uses that analysis to make recommendations for Army policy and future studies that may mitigate the alarming and increasing trend of Soldier suicide.

In response to the alarming rise in Army suicide rates, the Army undertook "The Army Study to Assess Risk and Resilience in Servicemembers" (Army STARRS) in 2009.[4] The Army STARRS study is not a single study, but seven closely related studies targeting different groups of Soldiers at different points in their Army service.[5] The seven studies are entitled:

1. The Historical Administrative Data Study (HADS),
2. The New Soldier Study (NSS),
3. The All Army Study (AAS),
4. The Clinical Reappraisal Study (CRS),

5. The Soldier Health Outcomes Study A (SHOS-A),

6. The Soldier Health Outcomes Study B (SHOS-B), and

7. The Pre/Post Deployment Study (PPDS).[6]

Army STARRS is funded by both the Department of the Army ($50 million) and with supplemental funds from the National Institute of Mental Health (NIMH) ($15 million) competitively awarded under a National Institute of Health Cooperative Agreement. This represents the single-largest study of the phenomenon of suicide ever undertaken.[7] Army STARRS is conducted by a consortium of investigators representing institutions including the Uniformed Services University of the Health Sciences, the University of California at San Diego, Harvard Medical School, and the University of Michigan, all in collaboration with the NIMH.[8]

Army STARRS collaborators published their first research papers in late 2013 and early 2014. Initial findings, while unsurprising to many behavioral health professionals, confirm many current theories regarding the phenomenon of suicide. Perhaps most importantly, the increase in Army suicides is paralleled by increasing rates of addiction to drugs and alcohol and negative mental health outcomes.[9] Also, contrary to strategic Army messaging, increasing suicide rates are not tied exclusively to Soldier deployment. Rather, the Army suicide rate has risen among Soldiers never deployed, currently deployed, and previously deployed alike.[10] Further, predictors of Army suicides are largely similar to those for civilians, although some are distinct to Army service,[11] such as relative levels of comfort and familiarity with as well as access to deadly weapons, and a finding that Soldier demotion within the past two years is a

contributing factor to Soldier suicide.[12] So what, specifically, are predictors of Soldier suicide?

Prior mental disorders, in particular major depression and intermittent explosive disorder, are strong predictors of suicidal behavior in Soldiers, although clearly not all Soldiers diagnosed with a mental disorder exhibit self-destructive behavior and not all Soldiers exhibiting self-destructive behavior are diagnosed with a mental disorder.[13] Currently and previously deployed Soldiers serving their first enlistment have a higher rate of suicide than those never deployed.[14] A separate study found that the highest Soldier suicide rates were among those who separated from the Army before the end of their first enlistment (39.5 to 48 per 100,000 PY). These early attrition cases constitute 28% of the suicides among the never deployed.[15] Taken together, all of these findings are important because they suggest that suicidal causality likely occurs before enlistment and appears to be more prominent among first-term enlistees, particularly those separated from the Army before the end of their first enlistment. These findings also suggest that it is not only depression, but a combination of depression and anger that predicts suicide attempts.[16]

Interestingly, infantrymen and combat engineers exhibit a staggering suicide rate among those never deployed (41.2 per 100,000 PY). The suicide rate among these specialties drops to near zero when deployed, and rises again among the previously deployed.[17] A small group of studies suggests that Soldiers attracted to combat arms occupations have much higher rates of sensation-seeking behaviors (impulsive, aggressive) than other Soldiers, and that these sensation-seeking Soldiers have much

greater difficulty adapting to regimented military training and garrison life, but are much better able to adapt to the uncertainty and risk of warfare.[18]

Up until recently, the Army did not allow women to serve in the combat arms. What does the literature suggest with regard to the phenomenon of female Soldier suicide? Army STARRS has revealed that the suicide rate for currently deployed women is three times that of never or previously deployed female Soldiers, that women serve in career fields where an average of 26.5% of the other Soldiers were also women, and suggestive evidence supports the notion that the probability of sexual assault increases during Soldier deployment. The significance here is unlike their male counterparts, female Soldiers demonstrate a propensity to commit suicide while deployed. The incidence of sexual assault, a causal factor of posttraumatic stress disorder (PTSD) and therefore suicide, is also higher during deployment, and typically as a gender females comprise just over one quarter of their unit. Seen differently, there are three males assigned to every one female assigned to an average Army unit, and both sexual assault and female suicides are more likely in a deployed environment. This literature suggests there may be a correlation between deployment, sexual assault, and suicide among female Soldiers, and it warrants further study. Specific causes for female Soldier suicidality during deployment remain unknown, but the obvious availability of and access to deadly weapons likely plays a role in the female Soldier propensity to commit suicide while deployed.[19]

Interestingly, in one of the first Army STARRS studies released in 2013, Dr. Matthew Nock et al., published what other experts seem to have known for decades as a causative risk factor for suicide: a reliable association between childhood adversities

such as sexual and physical abuse and household dysfunction, and subsequent suicidal behavior. Suicidal behaviors develop through complex psychological, social, neurobiological, and demographic factors which place individuals at risk. Parents who are impulsive and aggressive by nature, and as a by-product are abusive toward their children, are more likely to have children who are impulsive and aggressive. Attachment styles have also been found to be strongly related to psychopathology, with disorganized/controlling and insecure attachment styles of special importance. A growing body of work suggests that childhood adversity is associated with the epigenetic regulation of genes that play a role in the human stress response system, and these alterations may in turn lead to problems with emotional regulation and decision making, increasing the risk of suicidal behavior.

Suicidal behaviors are most often preceded by stressful life events that can be acute and often involve intimate relationships. For example, one study found that the most common stress-related circumstances leading to suicide among U.S. Soldiers were intimate partner problems and duty-related stress.[20] Sleep issues predict suicidal ideation. Demographically, the Army is disproportionately young and male, which naturally places Soldiers at a higher risk for suicide by virtue of their gender and age. And finally, a history of suicidal behavior in an individual is the single-strongest predictor of suicide.[21]

Dr. Nock et al., also turned their attention to protective factors, first citing social and familial support. Unit cohesion, including a perception of concerned leadership and camaraderie, can and does mitigate stress, the development of mental illnesses, and therefore suicidal behavior. They next consider psychological protective factors

including resilience, stoicism, character strength, life satisfaction, positive moods, self-esteem, hope, zest, gratitude, capacity to love, and a sense of meaning and purpose. But a broad range of variables may influence mental health treatment, including a lack of services and perceptual factors such as stigma, doubt about the effectiveness of treatment, or a desire to handle problems alone. Major challenges to suicide research and prevention include a very low base rate, associated stigma, the fact that suicidal behavior often occurs without warning, and that many Soldiers do not seek help because they fear others' responses or fear hindering or discontinuing their military career.[22]

In his accompanying commentary, Dr. David Jobes opines that the suicide challenges in the Army and Marine Corps are unique and demand an approach from the warrior's perspective. Suicide Prevention training in military practice is nothing more than another training requirement and not a truly helpful or informative experience. Seeking behavioral health help is widely regarded as a career-ender; an obvious reflection of personal weakness in a culture that demands strength, self-reliance, mental toughness, collectivism, self-sacrifice, and fearlessness. Stigma associated with mental illness in the military is rampant and not likely to change. An obvious clinical need for a Soldier to seek mental health care is not at all obvious to members of the U.S. military culture. An approach that the military might consider is placing behavioral health under the rubric of physical health and physical training in an attempt to diminish stigma.[23]

In a similar vein, George Mastroianni and Wilbur Scott of the Air Force Academy's Department of Behavioral Sciences and Leadership argue that we have chosen to maintain an all-volunteer force, affecting not only the composition of the

military, but the relationship of its members to cultural expectations. Very few people volunteer to shoulder the burden, and as a nation we permit our political leaders to involve us in unjust and unpopular wars. Many who have served in those wars have adopted or tolerated a set of ethical standards that deviates from those endorsed by the institutions they have sworn to serve. Where rhetoric and reality conflict, cynicism flourishes.[24] The crux of their argument is that the cultural and ethical disconnects that some military members experience in conjunction with a strong sense of isolation from the society they have sworn to defend may increase suicidal behavior among Service Members.

Keeping the focus upon the Soldier population, the Canadians have likewise produced some literature with regard to the phenomenon of Soldier suicide. Given the similar culture, history, and values of our two nations, that literature is certainly worth exploring here. The Canadians firmly link suicidality among Canadian Soldiers to previous interpersonal trauma--ranging from sexual trauma, to being badly beaten, to a history of child abuse--citing these as the events with the highest likelihood of associated suicide attempts. Canadian findings are consistent with previous research in civilian populations, strongly suggesting an association between traumatic events, mental disorder, and suicidal behaviors both with and without a diagnosis of PTSD. Our Canadian neighbors find that exposure to deployment-related events, in and of themselves, are insufficient to explain the development of suicidal behavior among military personnel but that the likelihood of a lifetime suicide attempt increases with an increasing number of traumatic events including combat-related events, but particularly interpersonal traumatic events such as human sexual or physical abuse.[25]

A second Canadian study finds that suicidal rate ratios between Canadian Soldiers who have deployed and have never deployed are not statistically different, but that a PTSD diagnosis increases the likelihood of suicidality among Canadian Soldiers regardless of whether the PTSD diagnosis was caused by combat-related events or not. Military deployment can traumatize a Soldier, while PTSD is caused by trauma and can lead to suicide.[26]

These independent Canadian studies are particularly interesting versus the Army STARRS approach of viewing Soldier suicide in a relative vacuum. The Canadians clearly see Soldiers as people with lifetime experiences who attempt or commit suicide as a *result* of something, as opposed to viewing Soldiers as an isolated population that demonstrates twice the propensity for suicide as the U.S. civilian population. If we accept these Canadian findings that Soldier suicide can be caused by trauma, particularly interpersonal trauma, and recognize that Dr. Nock et al.'s, "childhood adversity" might indicate trauma, then we might choose to reframe suicide among Soldiers through a lens of "trauma causality" instead of "Soldier causality," as the current Army STARRS methodology and structure seem to suggest. The remainder of this research project takes precisely this approach. The body of research supporting such a reframing is overwhelming.

One of America's foremost pioneers in the study of the causes and effects of child abuse trauma is Dr. John N. Briere of the Keck School of Medicine, University of Southern California. Dr. Briere's extensive work started with research and development of techniques for the psychological treatment of sexual abuse victims, but he has found many commonalities between the psychological trauma symptoms exhibited by sexual

abuse victims and victims of all other types of interpersonal trauma. His 1992 work, *Child Abuse Trauma: Theory and Treatment of the Lasting Effects*, remains a staple in the mental health community and does much to explain the phenomenon of suicidality as it pertains to interpersonal trauma, the development of PTSD, and the forming of a child's personality which may later predispose the growing child to suicidal behavior among other psychological disorders and behaviors. Before summarizing his 1992 work, it is important to define "traumatic experience." In order to understand how traumatic experience can contribute to suicidal behavior, we must understand that we are not addressing "trauma" in the medical, physical sense that one might associate with an automobile accident or kinetic combat experience resulting in a wound. Rather, we are addressing "traumatic experience" in terms of the psychological effects of experiencing an incident that is 1) sudden, unexpected, and non-normative, 2) exceeds the individual's perceived ability to meet its demands, and 3) disrupts the individual's frame of reference and other central psychological needs and related schemas.[27] While the physical traumatic experiences described above can certainly meet these criteria, they only represent one type of traumatic experience.

In his book, Dr. Briere persuasively argues that child maltreatment can be sexual, physical, psychological, and/or emotional. Classifying child maltreatment under this rubric can be difficult, as it is difficult to separate the "physical" effects of sexual or physical abuse from the psychological or emotional effects.[28] Child maltreatment can be (and often is) tied to parental alcoholism or drug addiction, is interpersonally traumatic to the child, and is especially harmful because the child is still learning the concepts of self, others, and the world.[29] The child is instinctively drawn to the protection of his or

her parents or caregivers, who in turn abuse the child, confusing the child's natural desire to securely emotionally attach to the parents or caregivers.[30] Parental or caregiver damage done to a child during his or her developmental stages results in the child developing perceptions about the intentions of others that can, and most often do, last a lifetime.

Over time, as unresolved traumatic experience layers atop unresolved traumatic experience, a minority of children, perhaps due to genetic factors, develop posttraumatic symptoms including cognitive distortions, altered emotionality such as depression or anxiety, dissociation which runs a spectrum from simple disengagement through the detachment or numbing of emotional effect, observation ("looking at oneself from above" during the act is often reported), amnesia, and at the other extreme is the development of multiple or dissociative personality disorder; alternate personalities who contain and hold the experiences that the child cannot accept in order to reduce cognitive dissonance and enable the child to continue to make sense of his or her world.[31] Lastly, such children invariably exhibit impaired self-reference. Convinced by their abusers that they are at fault for the abuse, the child learns that he or she is inherently bad, to hate him or herself and develops a cognitive schema in which they are inherently flawed, unworthy of love, unacceptable, and do not belong, likewise in an attempt to make sense of their world.[32]

As the child continues to grow, longer-term symptoms can become apparent in their behaviors and relationships. Anger is a central issue, often externalized toward others and sometimes internalized toward the self. Disturbed relatedness describes how impaired self-reference and a history of interpersonal abuse by caregivers leads to an

insecure attachment style, an extreme distrust of others, and social withdrawal. Later intimate relationships are difficult if not impossible, largely due to the cognitive dissonance that disrupted attachment development creates. Some victims later exhibit altered sexuality. Many see aggression as a “given” in interpersonal relationships. They may be openly aggressive in their relationships and/or passive-aggressive and manipulative, having learned that people are not inherently good and do not give of themselves freely. Rather, the victim learned and perceives the need to force or manipulate in order to get what they need from others. Sleep disturbances are common, as the victim’s autonomic nervous system is in constant overdrive, awaiting the next attack that they have learned and believe will come and is impossible to avoid. The victim usually develops a deep distrust of authority figures, firmly believing that an authority figure can and will use their power to abuse the victim. Many turn to avoidance strategies to escape considerable psychic dissonance by using alcohol, other psychoactive substances, indiscriminate sex, thrill-seeking or risky behaviors including criminality in order to avert their attention from their irreconcilable inner world. And when those strategies fail to yield results, many turn to suicide; not because they want to die, but because they want to end the pain.[33]

Treating victims of child abuse is difficult because it challenges them to change relational schemas they sub-consciously put in place, often before they developed the capacity for speech. These learned relational schemas made perfect sense when the child was relatively powerless and abused, but are dysfunctional in the absence of abuse or any context of real intimacy. Therapy can only be successful in an environment of trust and emotional support, but deep distrust and an insecure

attachment style regularly interfere with the victim's ability to have a warm relationship with anyone, including their therapist. Many child abuse victims are misdiagnosed with Borderline Personality Disorder (BPD) because in the absence of known causation (e.g., interpersonal trauma), the symptoms mimic those of BPD.[34] Most child abuse victims do not recognize themselves as having been abused, because their parents or caregivers have convinced them that their experiences are not abusive. Rather, they find great incongruence between "the way the world presents itself" and "the way the world really is," and become hopeless because they cannot reconcile the two. Their entire interpersonal world is dangerous, filled with people whom they cannot trust, and where what people, including the family and intimate partners, *say* is inconsistent with what people, including the family and intimate partners, *do*.[35]

Thus far, this research project has explored suicide among U.S. Service Members and Soldiers, Canadian studies of Soldiers, traumatic experience, particularly childhood trauma and the development of posttraumatic symptoms leading to suicide, a $65 million 2013 Army STARRS report largely confirming what Dr. John Briere published in 1992, and the circumstances currently shaping the all-volunteer force. We know that suicide is a complex phenomenon largely affecting enlistees serving their first term of enlistment regardless of whether they have deployed or not, and that rates in the Army and Marine Corps have risen significantly while those of the Navy and Air Force have not. If we accept the notion that most Soldiers exhibiting suicidal behavior are predisposed to such behavior before they enlist, perhaps as a function of unresolved traumatic experience or experiences, then we need to turn our attention to the accessions process to determine what, if anything, the Army and Marine Corps are

doing differently from the Navy and Air Force that might exacerbate the phenomenon of suicide.

One answer is unfortunately as obvious as it is plausible. It is the granting of criminal waivers, more specifically felony waivers to initial enlistees in order to meet enlistment goals. In 2007 alone, the Army granted 511 felony waivers, up from 249 in 2006. The Marine Corps granted 350 felony waivers in 2007, up from 208 the previous year. Most Army felony waivers were granted for possession of narcotics (excluding marijuana), burglary, larceny, and aggravated assault with a dangerous weapon. Most Marine Corps felony waivers were for burglary and aggravated assault.[36] By way of comparison, the Navy granted felony waivers to only five percent of those requiring any type of criminal waiver, and the Air Force granted none.[37] These figures in and of themselves are disturbing, but if mental illness and interpersonal trauma leading to suicidality are found at heightened levels in convicted criminals, then the granting of criminal waivers may very well help to explain heightened suicide rates in both the Army and Marine Corps while they've remained steady in the Navy and Air Force. What, then, does the literature have to say about mental illness and interpersonal trauma among convicted criminals? Convicted criminals are often incarcerated, so studies of prison populations may hold the answer.

A convincing body of research conducted from 1996 to 2009 finds that the incarcerated have higher rates of particular chronic and infectious diseases such as HIV/AIDS, hepatitis C, and heart disease as well as behavioral disorders such as substance abuse disorders, depression, schizophrenia, and PTSD. Another disparity of growing importance are elevated rates of victimization both before and during

incarceration.[38] Childhood physical abuse is reported by 54% of incarcerated women and by 56% of their male counterparts. Prior to age 18, physical abuse is more likely than sexual abuse among males, but the rates are only slightly lower for females at 47%.[39] Abuse during childhood is strongly correlated with adult victimization, substance abuse, and criminality.[40]

Violent victimization rates, inclusive of robbery, and sexual and physical assault, are about 21 per 1000 in American society, while prison studies reveal that one of every five prisoners is victimized by theft, or sexual or physical assault every six months while in prison.[41] In other words, most convicts go to prison with a history of victimization leading to alcohol and/or drug abuse, PTSD, depression, low self-esteem, and criminality before they are incarcerated. And then while incarcerated, they are further victimized by traumatic experiences, exacerbating their symptoms.[42]

While victims of trauma internalize it differently, some more common reactions are dissociation, impaired affect regulation, chronic characterological changes, and hyperarousal.[43] Unfortunately, trauma processing therapies such as prolonged exposure and cognitive restructuring require a safe, healing, and supportive environment in order to be effective. American prisons, like dysfunctional homes, are not any of these things and instead only further reinforce the cognitive structures and life lessons that the convict has already learned as a result of chronic victimization.

A second study addressing the prevalence of mental illness among the incarcerated estimated that 15-20% of the approximately two million people incarcerated in America are diagnosed with an Axis I (behavioral) and/or Axis II (personality) disorder, and that many of the incarcerated with mental illness have

substantial histories of sexual and physical abuse, homelessness, institutionalizations, and backgrounds characterized by chaotic and unstable family structures.[44] A third study, a doctoral dissertation, went on to posit that "the link between childhood adverse experience and adult criminal behavior is so well demonstrated that it is often described as a causal relationship."[45]

In response to rising suicide rates in the Army and the Marine Corps, in 2008 the Department of Defense (DOD) began publishing the Annual DOD Suicide Event Report (DODSER). While the report encompasses whether Soldiers who attempt or complete suicide have experienced administrative or legal difficulty in the last 90 days, it does not encompass the legal history of the Soldier to include prior convictions.[46] In fact, of the 46 Army STARRS reports already published or in press, only one addresses the significant link between criminal offenses and suicidality, but only considered certain kinds of offenses and a history of the past 12-24 months.[47]

In addition to the study of mental health and suicide as they relate to criminals in conjunction with what we have discovered with regard to the same in Soldiers, it is logical to explore the same phenomenon in America's youth and veteran populations. This is because we now know that Soldier suicides primarily occur among young males and that the cognitive structures predisposing one to commit suicide are formed very early in life, and are not likely to change in the absence of years of extensive psychotherapy. In her 1995 doctoral dissertation, Kolleen M. Martin conducted a study of 106 adolescents in Northern Virginia who had attempted suicide and found that insecure attachment styles appear to be a general risk factor for both suicidality and depression.[48] And regarding the U.S. veteran population, a doctoral dissertation by

Kathryn D. Cline finds that veteran Soldiers who are more outgoing and who have more social support are better able to resolve and grow from their traumatic experiences, and that pre-enlistment experiences such as early childhood trauma can have an effect upon post-deployment functioning, including the development of PTSD during or after deployment.[49] And finally, in a December, 2013 doctoral dissertation, Kathleen M. Benson found that OEF/OIF veterans who reported current suicidal ideation were more likely to report a history of pre-military physical abuse, sexual abuse, and a suicide attempt.[50]

Synthesizing this research in its totality, one can argue that known factors leading to mental illness and/or suicidal behavior are linked to one's self-image as positive or negative, and one's cognitive schemas of interpersonal relationships as positive and desirable as reflected in secure attachment, or negative and undesirable or feared as reflected in insecure attachment. The development of both self-image and attachment style are linked inextricably to early childhood experience as affected by trauma, particularly interpersonal trauma caused by parents or caregivers. In terms of the factors discovered to mitigate suicidal behavior, the qualities of being more outgoing and seeking familial and social support are undermined by a child abuse victim's negative self-image, distrust of others, and learned view of interpersonal relationships as dangerous, perhaps even inherently violent, and therefore undesirable or desired but feared. In other words, symptomatic child abuse victims are not extroverted and do not seek interpersonal relationships because they learned early in life that they are inherently flawed, that people and interpersonal relationships are hurtful and/or dangerous, and that safety is predicated upon not attracting attention to oneself. These

beliefs are so deeply-rooted that others view them as core aspects of the symptomatic victim's personality. The ultimate effects of traumatic experience can manifest themselves as anti-social behaviors such as criminality, in mental illness whether diagnosed or undiagnosed, and/or in self-destructive behaviors such as substance abuse and ultimately, suicide.

Viewing the phenomenon of Soldier suicide through this lens leads to several recommendations regarding Army policy and future study that may help to mitigate the challenge. The first Army policy recommendation is that the Army recognize suicide as the behavioral health-related phenomenon that it is. This allows placing its prevention with the Army medical community that better understands its causation than does the personnel community. The Army's recent initiative to move responsibility for the Army Substance Abuse Program from the Installation Management Command to the Army's Medical Command represents a recognition that behavioral health and substance abuse are linked; suicide prevention needs to follow because it is related to both.

A second Army policy recommendation is to review the necessity to enlist convicted criminals, particularly felons, into the Army. This population is known to exhibit a higher propensity for suicide, and studies suggest a logical, plausible link between current recruiting policy and practice and Soldiers demonstrating a propensity for anti-social behavior and suicide. The Army might do well to consider accepting recruiting risk in other areas as well as the cost savings represented by attracting, inspiring, enlisting, training, and equipping Soldiers who do not demonstrate the heightened risk of misbehavior, substance abuse, and suicide during their first enlistment, hurting Army readiness and creating additional demand for more recruits.

A third and related Army policy recommendation is to review its current policy of promoting Soldiers into leadership positions or separating them from the Army. In the not too distant past, the Army had Specialist ranks at the grades of E4, E5, E6, and E7. Other nations' armed forces, most notably the Germans, have employed such a model for years and remain successful. Allowing for more experience in the junior enlisted ranks offers tangible benefits as the Army continues to force responsibility downward as a result of budget constraints and grade plate reductions. This decreases stress among those teammates who do not desire supervisory responsibilities and reduces stress on the recruiting community by requiring fewer numbers of new Army enlistees from year to year. Perhaps we would no longer enlist convicted criminals with an increased risk for misbehavior, substance abuse, and suicide because we simply would not have to.

A fourth Army policy recommendation is, if feasible, to capture the entire legal history of Soldiers who attempt or complete Soldier suicide to decisively conclude whether or not to continue granting criminal waivers to new recruits. While other data collected here strongly suggest a link between criminality, anti-social behavior, substance abuse, and suicide, the Army and DOD do not appear to capture this information in order to inform recruiting policy.

As a recommendation for future Army study, we need to more closely examine the phenomenon of trauma, particularly interpersonal trauma, as it relates to suicide. Most of the data revealed in this project suggest such trauma as a causality for suicide, particularly when it happens at a very young age, exactly when a person is still developing their sense of self, others, and the world. One Army STARRS study currently in press is entitled *Childhood Maltreatment and Lifetime Suicidal Behaviors*

among New Soldiers in the U.S. Army, and represents an institutional step in precisely this direction.[51]

Some have argued that a way to reduce suicidal behavior among Soldiers is to capture their interpersonal trauma history as a predictor of suicidal behavior during the accessions process. While a reasonable observation, capturing a history of interpersonal trauma is exceptionally difficult because of the defenses the human mind uses to protect the victim from the trauma. The strongest defense the human mind uses is that of repression—forcing the memory of the event into the unconscious mind, which can be aided by dissociation—a disturbance or alteration in the normally integrative functions of identity, memory, or consciousness.[52] The result of a "successful" repression defense is amnesia—the victim of the trauma cannot recall the traumatic event in part or in its entirety, and by definition they don't consciously know they are doing it. The other, less formidable defense is that of denial—refusing to acknowledge the truth before them-- because that truth interferes with the cognitive schema that allow for a sense of personal identity, as is the case with a small child who develops with parents or caregivers who claim to love the child but consistently abuse the child.[53] The child learns to deny the abuse, earnestly believing the lie that they're telling themselves. The point is that victims of childhood interpersonal trauma either cannot or will not recall the abusive experience or experiences, or may choose to consciously deny that such experiences occurred because of stigma, shame, or the fear of losing their enlistment.

In the final analysis, we cannot presently conclude that heightened suicide rates in the Army are a function of Army policy. The granularity of data needed to make such an assessment simply does not exist. As David A. Jobes cites in his commentary, "What

tends to shock anyone new to the field of suicide prevention is how remarkably *un*-evolved and surprisingly limited our scientific knowledge base on the topic actually is."[54] But if we accept existing work on the topic suggesting links between trauma, criminality, anti-social and self-destructive behavior, then there is reason to believe that we may find links between trauma, criminal waivers, Soldier misbehavior resulting in discharge, substance abuse and suicide. Additionally, if we can frame suicide as a phenomenon that affects readiness (an item of Army senior leader interest) rather than behavioral health (an item of Army senior leader relative disinterest), we can influence real institutional action to diminish the challenge, perhaps starting with recruiting standards. Thinking of suicide as something "caused by trauma" rather than as a stigmatized phenomenon among the stigmatized mentally ill might help to destigmatize it. An important outcome of this shift in thinking will be to reduce suicide in the Army to levels at or below those of the U.S. population, just as they were before the wars in Iraq and Afghanistan required lowering enlistment standards in order to man the force. The body of studies considered here strongly suggest that the unintended consequences of that policy must be reversed—it is a readiness issue of the utmost importance to the Profession of Arms and the Nation.

Endnotes

[1] Kerry J. Ressler and Eric B. Schoomaker, "Commentary on 'The Army Study to Assess Risk and Resilience in Servicemembers (Army STARRS): Army STARRS: A Framingham-Like Study of Psychological Health Risk Factors in Soldiers," *Psychiatry* 77, no. 2 (Summer 2014): 120.

[2] George R. Mastroianni and Wilbur J. Scott, "Reframing Suicide in the Military," *Parameters* (Summer 2011): 6; National Center for Telehealth & Technology and Defense Centers of Excellence for Psychological Health & Traumatic Brain Injury, "Calendar Year 2014

Department of Defense Suicide Event Report," July 16, 2015, https://t2health.dcoe.mil/sites/default/files/CY-2014-DoDSER-Annual-Report.pdf (accessed February 20, 2017).

[3] Rajeev Ramchand et al., *The War Within: Preventing Suicide in the U.S. Military* (Santa Monica, CA: RAND Center for Military Health Policy Research, 2011), 10.

[4] Ressler and Schoomaker, "Commentary on 'The Army Study to Assess Risk and Resilience in Servicemembers (Army STARRS)."

[5] Ibid., 125.

[6] Ibid., 125-126.

[7] Ibid., 124.

[8] Ibid.

[9] Ibid., 123.

[10] Ibid.

[11] Ibid.

[12] Robert J. Ursano et al., "The Army Study to Assess Risk and Resilience in Service Members (Army STARRS)," *Psychiatry* 77, no. 2 (Summer 2014): 108.

[13] Ibid.

[14] Ibid., 113.

[15] R.C. Kessler et al., "Occupational Differences in U.S. Army Suicide Rates," *Psychological Medicine* 45 (2015): 3301.

[16] Ursano et al., "The Army Study to Assess Risk and Resilience in Service Members," 113.

[17] Kessler et al., "Occupational Differences in U.S. Army Suicide Rates," 3299.

[18] Ibid., 3300.

[19] A. E. Street et al., "Understanding the Elevated Suicide Risk of Female Soldiers during Deployments," *Psychological Medicine* 45 (2015): 718-724.

[20] Joseph Logan et al., "Characteristics of Suicides among U.S. Army Active Duty Personnel in 17 U.S. States from 2005 to 2007," *American Journal of Public Health* 102, no. S1 (2012): S40.

[21] Matthew K. Nock et al., "Suicide among Soldiers: A Review of Psychosocial Risk and Protective Factors," *Psychiatry* 76, no. 2 (Summer 2013): 98-115.

[22] Ibid.

[23] David A. Jobes, “Commentary on ‘Suicide among Soldiers: A Review of Psychosocial Risk and Protective Factors:’ Reflections on Suicide among Soldiers,” *Psychiatry* 76, no. 2 (Summer 2013): 126-130.

[24] George R. Mastroianni and Wilbur J. Scott, “Reframing Suicide in the Military,” *Parameters* (Summer 2011): 18.

[25] Shay-lee Belik et al., “Relation between Traumatic Events and Suicide Attempts in Canadian Military Personnel,” *Canadian Journal of Psychiatry* 54, no. 2 (February 2009): 96-102.

[26] Alain Brunet et al., “Suicide Risk among Active and Retired Canadian Soldiers: The Role of Posttraumatic Stress Disorder,” *Canadian Journal of Psychiatry* 59, no. 9 (September 2014): 457-458.

[27] John N. Briere, *Child Abuse Trauma: Theory and Treatment of the Lasting Effects* (Newbury Park, CA: Sage, 1992), 130.

[28] Ibid., 3-15.

[29] Ibid., 17.

[30] Ibid., 44.

[31] Ibid., 19-43.

[32] Ibid, 44.

[33] Ibid., 48-62.

[34] Ibid., 73.

[35] Ibid., 89.

[36] Lizette Alvarez, “Army and Marine Corps Grant More Felony Waivers,” *New York Times*, April 22, 2008.

[37] Joel Roberts, “Military Granting More Criminal Waivers,” *CBS News,* February 14, 2007, http://www.cbsnews.com/news/military-granting-more-criminal-waivers/ (accessed February 20, 2017).

[38] Nancy Wolff et al., “Patterns of Victimization among Male and Female Inmates: Evidence of an Enduring Legacy,” *Violence and Victims* 24, no. 4 (2009): 469.

[39] Ibid., 477.

[40] Ibid., 470.

[41] Ibid.

[42] Ibid., 478.

[43] Ibid., 480.

[44] Joseph P. Galanek, "The Cultural Construction of Mental Illness in Prison: A Perfect Storm of Pathology," *Cult Med Psychiatry* 37 (2013): 196; Ibid., 206.

[45] Lionel S. Wininger, *Understanding Psychopathy with Measures of Attachment, Anxiety, and Childhood Trauma*, Doctoral Dissertation (Ann Arbor, MI: Long Island University, The Brooklyn Center, June 2016), 71.

[46] National Center for Telehealth and Technology "CY 2014 Department of Defense Suicide Event Report Annual Report," July 16, 2015, http://t2health.dcoe.mil/sites/default/files/CY-2014-DoDSER-Annual-Report.pdf (accessed February 20, 2017): 49.

[47] Ronald C. Kessler et al., "Predicting Suicides after Psychiatric Hospitalization in U.S. Army Soldiers: The Army Study to Assess Risk and Resilience in Servicemembers (Army STARRS)," *JAMA Psychiatry* 72, no. 1 (January 2015): 49.

[48] Kolleen M. Martin, *Attachment Style, Depression, and Loneliness in Adolescent Suicide Attempters*, Doctoral Dissertation (Ann Arbor, MI: UMI, August 21, 1995), 30; Ibid., iii.

[49] Kathryn D. Cline*, The Relationship between Adverse Childhood Experiences and Posttraumatic Growth in Combat Exposed Soldiers*, Doctoral Dissertation (Ann Arbor: University of Michigan, July 1, 2013), 37-40; Ibid., 44.

[50] Kathleen M. Benson, *Suicide Resilience among Operation Enduring Freedom and Operation Iraqi Freedom Veterans: Sense of Coherence as a Moderator of the Relationship between Traumatic Experiences and Suicidality*, Doctoral Dissertation (Ann Arbor: University of Michigan, December 2013): 86.

[51] STARRS-LS, "Study to Assess Risk and Resilience in Servicemembers – Longitudinal Study," linked from *STARRS-LS Home Page* at "Publications," http://starrs-ls.org/#/list/publications (accessed January 5, 2017).

[52] Jean Jenson, *Reclaiming Your Life: a Step-by-Step Guide to Using Regression Therapy to Overcome the Effects of Childhood Abuse* (New York: Penguin, 1995), 11; John N. Briere, *Child Abuse Trauma: Theory and Treatment of the Lasting Effects* (Newbury Park, CA: Sage, 1992), 36.

[53] Jean Jenson, *Reclaiming Your Life: A Step-by-Step Guide to Using Regression Therapy to Overcome the Effects of Childhood Abuse* (New York: Penguin, 1995), 11.

[54] David A. Jobes, "Commentary on 'Suicide among Soldiers: A Review of Psychosocial Risk and Protective Factors: Reflections on Suicide among Soldiers," *Psychiatry* 76, no. 2 (Summer 2013): 127.