

BRIEF REPORT

Criminal Justice Involvement, Trauma, and Negative Affect in Iraq and Afghanistan War Era Veterans

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Objective: Although criminal behavior in veterans has been cited as a growing problem, little is known about why some veterans are at increased risk for arrest. Theories of criminal behavior postulate that people who have been exposed to stressful environments or traumatic events and who report negative affect such as anger and irritability are at increased risk of antisocial conduct. **Method:** We hypothesized veterans with posttraumatic stress disorder (PTSD) or traumatic brain injury (TBI) who report anger/irritability would show higher rates of criminal arrests. To test this, we examined data in a national survey of $N = 1,388$ Iraq and Afghanistan war era veterans. **Results:** We found that 9% of respondents reported arrests since returning home from military service. Most arrests were associated with nonviolent criminal behavior resulting in incarceration for less than 2 weeks. Unadjusted bivariate analyses revealed that veterans with probable PTSD or TBI who reported anger/irritability were more likely to be arrested than were other veterans. In multivariate analyses, arrests were found to be significantly related to younger age, male gender, having witnessed family violence, prior history of arrest, alcohol/drug misuse, and PTSD with high anger/irritability but were not significantly related to combat exposure or TBI. **Conclusions:** Findings show that a subset of veterans with PTSD and negative affect may be at increased risk of criminal arrest. Because arrests were more strongly linked to substance abuse and criminal history, clinicians should also consider non-PTSD factors when evaluating and treating veterans with criminal justice involvement.

Keywords: veterans, criminal arrest, posttraumatic stress disorder, traumatic brain injury

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The Institute of Medicine (2010) reported that criminal justice involvement is one of the most significant problems for Iraq and Afghanistan war veterans. Many veterans have returned home diagnosed with posttraumatic stress disorder (PTSD) and traumatic brain injury (TBI; Tanielian & Jaycox, 2008), which have been linked to incarceration, aggression, or violence among veterans from previous conflicts (Calhoun, Malesky, Bosworth, & Beckham, 2005; Grafman, Schwab, Warden, & Pridgen, 1996; Greenberg & Rosenheck, 2009; Pandiani, Rosenheck, & Banks, 2003; Saxon et al., 2001; Shaw, Churchill, Noyes, & Loeffelholz, 1987). Recent estimates suggest that over 200,000 veterans are in U.S. jails and prisons, and more than half have been incarcerated for violent offenses (United States Bureau of Justice Statistics, 2007). This accounts for about 10% of the inmate population and may be an underestimate because veteran status is not always collected.

Clinicians who treat veterans in either Veterans Affairs (VA) or non-VA settings will likely encounter veterans with criminal backgrounds (Calhoun et al., 2005). However, little is known about criminal behavior of veterans who served in Operation Iraqi Freedom and Operational Enduring Freedom (Institute of Medicine, 2010), particularly among those diagnosed with PTSD or TBI.

Agnew's general strain theory of criminal behavior posits that people are at increased risk of antisocial conduct if they previously have been exposed to trauma and subjectively report "negative affect," specifically anger and irritability (Agnew & White, 1992; Maschi, Bradley, & Morgen, 2008). Empirical research has supported this theory by demonstrating that, in the wake of stressful environments or traumatic events, negative affect predicts juvenile delinquency (Maschi et al., 2008), peer deviance (Mason, Hitch, & Spoth, 2009), alcohol-related crimes (Day, Howells, Heseltine, & Casey, 2003), aggression (Burt, Mikolajewski, & Larson, 2009; Roberton, Daffern, & Bucks, 2012), psychopathic violence (Kroner, Forth, & Mills, 2005), and sex offending (McCoy & Fremouw, 2010). Negative affect is common in PTSD and TBI, and many with these conditions report symptoms of anger and irritability. Thus, this article analyzes data from a national sample of Iraq and Afghanistan war veterans to test the hypothesis that anger/irritability associated with PTSD and TBI is related to criminal justice involvement.

Method

Participants

The National Post-Deployment Adjustment Survey (NPDAS) sample was drawn by the U.S. Department of Veterans Affairs Environmental Epidemiological Service (EES) in May 2009 from a random selection of a roster developed by Defense Manpower Data Center of over one million veterans who served in the U.S. military on or after September 11, 2001, and were separated from active duty in the Armed Forces or served as a member of the National Guard or Reserves. In order to ensure adequate representation of both genders, the sample was stratified and women veterans were oversampled. A sample of $N = 1,388$ completed the survey, yielding a 56% corrected-response rate. This rate is comparable to, or greater than, that achieved in other national surveys of veterans (Beckham et al., 2008; Tanielian & Jaycox, 2008; Vogt et al., 2011).

No gender or geographic differences between responders and nonresponders emerged. Age difference was significant but of low

magnitude between responders ($M_{\text{age}} = 36.2$, $SD = 10.1$) and nonresponders ($M_{\text{age}} = 33.6$, $SD = 8.9$). Responder characteristics corresponded to known military data (52% Army, 18% Air Force, 16% Navy, 13% Marines, and 1% Coast Guard; 30% non-White; 48% National Guard/Reserves), and the final sample included veterans from 50 states, Washington, DC, and four territories in approximately the same proportion as the actual military and matched the most populated states of military service members.

Procedures and Materials

Following Institutional Review Board approval, the Dillman Method (Dillman, Smyth, & Christian, 2009) was employed from July 2009–May 2010 to conduct a 35-min confidential survey. This method involves multiple contacts to maximize response rate, varied contacts to increase effectiveness with initial nonrespondents, and mailings designed to connect personally with recipients.

Procedures were identical for both the online and print surveys; 80% of respondents took the survey online while 20% completed it on the print version. An initial study of 500 surveys (15% of the total sample) was piloted to identify unanticipated technical problems. Study respondents during the pilot phase were reimbursed \$40 for completing the survey, whereas those completing the survey during the remainder of the study period received \$50. All other procedures were identical for both phases of the survey. To examine for any differences in respondent characteristics secondary to survey medium or reimbursement rate, subgroups were compared on demographic, military, and clinical variables. No significant differences according to survey medium or pilot wave/reimbursement rate were detected.

Comparison of the demographic, military, and clinical variables of those who completed the survey in response to the first invitation (Wave 1 survey responders) with those who completed the survey after more than one request in later mailings (Waves 2, 3, 4) was made. The rationale for this was that completers in Waves 2, 3, and 4 would have been nonresponders if we only had one wave (Dillman et al., 2009). No differences were detected.

In the surveys, criminal justice involvement was measured by asking participants, "Have you been in jail or prison since deployment?" Positive response prompted specification of incarceration length and clarification as to whether the arrest was for a violent or nonviolent crime. Variables known to be linked to criminal behavior and recidivism were identified through literature review, and variables included age, gender, witnessing family violence, and previous criminal arrests. Combat exposure was measured with the Combat Experiences Scale from the Deployment Risk and Resilience Inventory (King, King, & Vogt, 2003). Substance misuse was scored positive if the veteran had a score of over 2 on the Drug Abuse Screening Test (DAST; Skinner, 1982) or had a score over 7 on the Alcohol Use Disorder Identification Test (AUDIT; Bradley et al., 1998).

PTSD was measured by the Davidson Trauma Scale (DTS; Davidson et al., 1997) using a cutoff of 48, which showed 0.82 sensitivity and 0.94 specificity with the Structured Clinical Interview of Diagnosis (SCID) in Iraq and Afghanistan war veterans (McDonald, Beckham, Morey, & Calhoun, 2009). The item "Have you been irritable or had outbursts of anger?" was dichotomized by low (*not at all, once only*, or *2 to 3 times*) versus high (*4 to 6 times* or *every day*) frequency of anger/irritability in the past week.

Table 1
Participant Characteristics

Characteristic	Weighted <i>N</i>	Weighted %
Education beyond high school	894	81.1
Race non-White	327	29.7
Married	672	61.1
Employed (full time or part time)	862	78.2
Witnessed parents fighting	79	7.1
History of previous arrests	133	12.1
Multiple deployments	300	27.2
Over 1 year deployed	292	26.5
Substance misuse	346	31.4
Probable TBI without increased irritability	163	14.8
Probable TBI with increased irritability	91	8.2
Probable PTSD with low irritability	97	8.0
Probable PTSD with high irritability	124	11.3
Postdeployment arrest	100	9.0
Incarcerated more than 2 weeks	14	1.3
Violent crime	23	2.1

Note. PTSD = posttraumatic stress disorder; TBI = traumatic brain injury.

Assessment of TBI followed expert consensus guidelines (Ruff, Iverson, Barth, Bush, & Broshek, 2009) and was scored positive if the participant reported a past head injury and endorsed one of the following: loss of consciousness, posttrauma amnesia, being dazed or “seeing stars” immediately after injury or upon regaining consciousness, skull fracture, or brain surgery. Participants were also asked, “Did any of the following problems [including irritability] begin or get worse afterward?”

Results

Sample characteristics are listed in Table 1. Because women constituted 33% of the current sample but represent an estimated 15.6% of the military based on September 2009 figures (Defense Manpower Data Center, 2010), data in the current study were

weighted to reflect the latter proportion, yielding a weight-adjusted sample of $N = 1,102$.

Bivariate associations were conducted using chi-square analyses. Relationships between criminal arrest and anger/irritability in PTSD and TBI are presented in Table 2 and Figure 1. Both support the hypothesis that veterans with TBI or PTSD reporting concurrent anger/irritability were more likely to be arrested. Bivariate associations with arrest are presented in Table 3. Younger age, male gender, substance misuse, witnessing parents fighting, history of arrests, and higher combat exposure were significantly associated with criminal arrests.

Outcomes of the multivariate analysis using logistic regression are presented in Table 4. The model was statistically significant ($\chi^2 = 149.71$, $df = 10$, $p < .0001$) and accounted for one quarter of the variance in criminal justice involvement ($R^2 = .27$). Factors associated with arrests in the final model included younger age, male gender, history of arrests, witnessing family violence, substance misuse, and PTSD with high anger/irritability; TBI with increased irritability approached, but did not achieve, statistical significance in this multivariate model.

Combat exposure was significantly associated with arrest in bivariate analyses but failed to achieve significance in the multivariate protocol; post hoc analyses indicated the link between combat exposure and arrest was mediated by PTSD with high irritability.

Discussion

The data indicate that the subset of veterans with PTSD with high irritability may be at increased risk of criminal arrest after they return home from deployment, which is consistent with the general strain theory of criminal behavior (Agnew & White, 1992) and literature on veterans of other wars showing that PTSD hyperarousal symptoms such as anger and irritability elevate the risk of violence (Savarese, Suvak, King, & King, 2001; Taft et al., 2007). Clinicians should be aware that veterans with PTSD who report very frequent symptoms of anger

Table 2
Associations Between Arrests and Negative Affect in Veterans With Probable TBI or PTSD

Independent variable	Weighted <i>n</i>	Arrested <i>n</i>	Arrested %	χ^2	<i>p</i>
Probable TBI without increased irritability					
Yes	163	13	7.97	0.27	.6046
No	939	87	9.23		
Probable TBI with increased irritability					
Yes	91	23	25.48	32.50	<.0001
No	1,011	77	7.57		
Probable PTSD with low irritability					
Yes	97	13	13.36	2.42	.1194
No	1,005	87	8.62		
Probable PTSD with high irritability					
Yes	124	28	22.76	32.01	<.0001
No	978	71	7.30		

Note. Participants meeting criteria for TBI were asked, “Did any of the following problems begin or get worse afterward?” and prompted to note if they had experienced either increased or no increased irritability after the TBI occurred. PTSD was measured by the Davidson Trauma Scale (Davidson et al., 1997), with the item, “Have you been irritable or had outbursts of anger?” dichotomized by low (*not at all, once only, or 2 to 3 times*) versus high (*4 to 6 times or every day*) frequency in the past week. PTSD = posttraumatic stress disorder; TBI = traumatic brain injury.

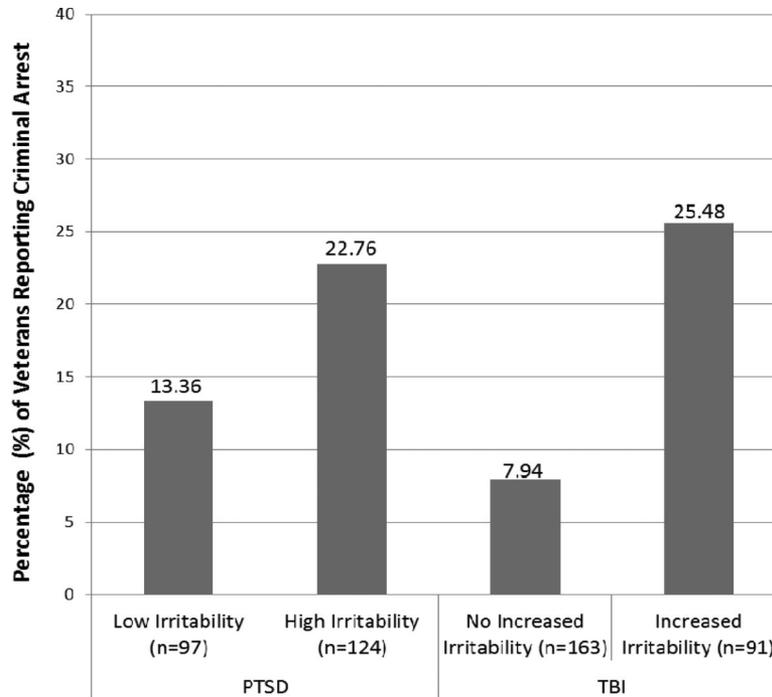


Figure 1. Postdeployment arrest rate as a function of PTSD, TBI, and negative affect in Iraq and Afghanistan war era veterans. PTSD = posttraumatic stress disorder; TBI = traumatic brain injury.

and irritability may be at increased risk of engaging in criminal behavior.

The current findings suggest that interventions targeting symptoms of anger and irritability have the potential to reduce arrest recidivism in veterans with both PTSD and criminal histories; if clinicians can help veterans with PTSD reduce episodes of anger and irritability, the results imply that these veterans may have less involvement in the criminal justice system in the future. Similarly, VA Justice Outreach programs and Veteran Treatment Courts,

which are both aimed at redirecting veterans from jails to mental health services (National Association of Drug Court Professionals, 2011; Russell, 2009), could routinely recommend interventions targeting symptoms of anger and irritability.

At the same time, PTSD with negative affect was less strongly related to criminal justice involvement than were other variables frequently found in civilian populations. Like their civilian counterparts, veterans who are young and male, come from troubled family backgrounds (which may be a proxy for child maltreatment), abuse

Table 3
Associations Between Covariates and Postdeployment Criminal Arrests

Independent variable	Weighted <i>n</i>	Arrested <i>n</i>	Arrested %	χ^2	<i>p</i>
Age					
Below median (less than 33 years)	615	87	14.19	44.89	<.0001
Median or above (33 years or older)	487	12	2.54		
Gender				8.24	.0041
Male	930	94	10.11		
Female	172	6	3.28		
High combat exposure				16.06	<.0001
Yes (median or above)	597	73	12.22		
No (below median)	505	27	5.28		
Witnessed parents fighting				26.17	<.0001
Yes	79	20	25.00		
No	1,023	80	7.82		
Substance misuse				71.80	<.0001
Yes	346	69	19.85		
No	756	31	4.09		
History of previous arrests				36.23	<.0001
Yes	133	31	23.05		
No	969	69	7.11		

Table 4
*Multivariate Analysis of Factors Associated With
 Postdeployment Criminal Arrest*

Independent variable	Odds ratio	Lower 95% CI	Upper 95% CI	<i>p</i>
Male	3.22	1.23	8.42	.0173
Age	0.93	0.90	0.96	<.0001
Witnessed parents fighting	4.06	2.12	7.78	<.0001
History of previous arrests	2.31	1.36	3.91	.0019
High combat exposure	1.24	0.72	2.11	.4372
Substance misuse	3.37	2.06	5.49	<.0001
Probable TBI without increased irritability	0.72	0.36	1.43	.3437
Probable TBI with increased irritability	1.70	0.87	3.33	.1207
Probable PTSD with low irritability	1.30	0.62	2.72	.4947
Probable PTSD with high irritability	2.13	1.15	3.95	.0167

Note. $R^2 = .27$, area under the curve = .86, $\chi^2 = 149.71$, $df = 10$, $p < .0001$. CI = confidence interval; PTSD = posttraumatic stress disorder; TBI = traumatic brain injury.

substances, or have criminal backgrounds appear at higher risk of breaking the law. Civilian research has shown robust associations between these types of variables and juvenile delinquency (Schubert, Mulvey, & Glasheen, 2011), adult criminal behavior (Skeem, Manchak, & Peterson, 2011), and violence (Elbogen & Johnson, 2009). Clinicians should thus consider that nonmilitary factors might contribute to criminal behavior by veterans. Veterans with criminal arrest histories should also be monitored closely for alcohol and drug misuse because these factors are frequently linked to reoffending.

Limitations should be considered. Although reliance on self-report can result in the underreporting of symptoms or behavior, self-report of arrest has consistently shown high correlations with other measures of criminal justice involvement (Farrington, 1973; Nieves, Draine, & Solomon, 2000). Given cross-sectional data, causal interpretation of results is limited. Diagnoses and military experiences of nonresponders are unknown. Analyses of immediate versus delayed responders, however, did not show notable bias in the final sample.

The current study takes a step toward uncovering characteristics associated with criminal justice involvement among Iraq and Afghanistan war veterans. The findings underscore the need for clinicians to recognize that many veterans seeking treatment, particularly those with PTSD, anger, and irritability, are at higher risk for arrest. Anger has been shown to reduce treatment adherence and increase the rate of PTSD treatment dropout in veteran populations (Forbes et al., 2008), and the current data suggest that patients with PTSD who are difficult to engage may also be those who are at increased risk of criminal justice contact. Clinicians should also remain aware that the same factors related to arrest in civilian populations (e.g., substance abuse) are also relevant for veterans. Continued investigation of different pathways to criminal arrest may be helpful in developing better assessment and treatment strategies for veterans at increased risk of criminal justice involvement.

References

Agnew, R., & White, H. R. (1992). An empirical test of general strain theory. *Criminology*, 30, 475–500. doi:10.1111/j.1745-9125.1992.tb01113.x

- Beckham, J. C., Becker, M. E., Hamlett-Berry, K. W., Drury, P., Kang, H. K., Wiley, M. T., . . . McFall, M. E. (2008). Preliminary findings from a clinical demonstration project for veterans returning from Iraq or Afghanistan. *Military Medicine*, 173, 448–451.
- Bradley, K. A., Bush, K. R., McDonell, M. B., Malone, T., Fihn, S. D., & the Ambulatory Care Quality Improvement Project (ACQUIP). (1998). Screening for problem drinking: Comparison of CAGE and AUDIT. *Journal of General Internal Medicine*, 13, 379–388. doi:10.1046/j.1525-1497.1998.00118.x
- Burt, S. A., Mikolajewski, A. J., & Larson, C. L. (2009). Do aggression and rule-breaking have different interpersonal correlates? A study of antisocial behavior subtypes, negative affect, and hostile perceptions of others. *Aggressive Behavior*, 35, 453–461. doi:10.1002/ab.20324
- Calhoun, P. S., Malesky, L. A., Jr., Bosworth, H. B., & Beckham, J. C. (2005). Severity of posttraumatic stress disorder and involvement with the criminal justice system. *Journal of Trauma Practice*, 3(3), 1–16. doi:10.1300/J189v03n03_01
- Davidson, J. R. T., Book, S. W., Colket, J. T., Tupler, L. A., Roth, S., David, D., . . . Feldman, M. E. (1997). Assessment of a new self-rating scale for posttraumatic stress disorder: The Davidson Trauma Scale. *Psychological Medicine*, 27, 153–160. doi:10.1017/S0033291796004229
- Day, A., Howells, K., Heseltine, K., & Casey, S. (2003). Alcohol use and negative affect in the offence cycle. *Criminal Behaviour and Mental Health*, 13, 45–58. doi:10.1002/cbm.530
- Defense Manpower Data Center. (2010). *FY2009 annual demographic profile of military members in the Department of Defense and U.S. Coast Guard*. Patrick Air Force Base, FL: Defense Equal Opportunity Management Institute.
- Dillman, D. A., Smyth, J. D., & Christian, L. M. (2009). *Internet, mail, and mixed-mode surveys: The tailored design method* (3rd ed.). New York, NY: Wiley.
- Elbogen, E. B., & Johnson, S. C. (2009). The intricate link between violence and mental disorder: Results from the national epidemiologic survey on alcohol and related conditions. *Archives of General Psychiatry*, 66, 152–161. doi:10.1001/archgenpsychiatry.2008.537
- Farrington, D. (1973). Self-reports of deviant behavior: Predictive and stable? *Journal of Criminal Law and Criminology*, 64, 99–110. doi:10.2307/1142661
- Forbes, D., Parslow, R., Creamer, M., Allen, N., McHugh, T., & Hopwood, M. (2008). Mechanisms of anger and treatment outcome in combat veterans with posttraumatic stress disorder. *Journal of Traumatic Stress*, 21, 142–149. doi:10.1002/jts.20315
- Grafman, J., Schwab, K., Warden, D., & Pridgen, A. (1996). Frontal lobe injuries, violence, and aggression: A report of the Vietnam head injury study. *Neurology*, 46, 1231–1238. doi:10.1212/WNL.46.5.1231
- Greenberg, G. A., & Rosenheck, R. A. (2009). Mental health and other risk factors for jail incarceration among male veterans. *Psychiatric Quarterly*, 80, 41–53. doi:10.1007/s1126-009-9092-8
- Institute of Medicine. (2010). *Returning home from Iraq and Afghanistan: Preliminary assessment of readjustment needs of veterans, service members, and their families*. Washington, DC: The National Academies Press.
- King, D. W., King, L. A., & Vogt, D. S. (2003). *Manual for the Deployment Risk and Resilience Inventory (DRRI): A collection of measures for studying deployment related experiences of military veterans*. Boston, MA: Department of Veteran Affairs.
- Kroner, D. G., Forth, A. E., & Mills, J. F. (2005). Endorsement and processing of negative affect among violent psychopathic offenders. *Personality and Individual Differences*, 38, 413–423. doi:10.1016/j.paid.2004.04.019
- Maschi, T., Bradley, C. A., & Morgen, K. (2008). Unraveling the link between trauma and delinquency: The mediating role of negative affect and delinquent peer exposure. *Youth Violence and Juvenile Justice*, 6, 136–157. doi:10.1177/1541204007305527

- Mason, W. A., Hitch, J. E., & Spoth, R. L. (2009). Special populations: Adolescents: Longitudinal relations among negative affect, substance use, and peer deviance during the transition from middle to late adolescence. *Substance Use & Misuse, 44*, 1142–1159. doi:10.1080/10826080802495211
- McCoy, K., & Fremouw, W. (2010). The relation between negative affect and sexual offending: A critical review. *Clinical Psychology Review, 30*, 317–325. doi:10.1016/j.cpr.2009.12.006
- McDonald, S. D., Beckham, J. C., Morey, R. A., & Calhoun, P. S. (2009). The validity and diagnostic efficiency of the Davidson Trauma Scale in military veterans who have served since September 11th, 2001. *Journal of Anxiety Disorders, 23*, 247–255. doi:10.1016/j.janxdis.2008.07.007
- National Association of Drug Court Professionals. (2011). *Justice for vets: The national clearinghouse for veterans treatment courts*. Retrieved from <http://www.nadcp.org/node/430>
- Nieves, K., Draine, J., & Solomon, P. (2000). The validity of self-reported criminal arrest history among clients of a psychiatric probation and parole service. *Journal of Offender Rehabilitation, 30*(3–4), 133–151. doi:10.1300/J076v30n03_07
- Pandiani, J. A., Rosenheck, R., & Banks, S. M. (2003). Elevated risk of arrest for Veteran's Administration behavioral health service recipients in four Florida counties. *Law and Human Behavior, 27*, 289–298. doi:10.1023/A:1023483807731
- Robertson, T., Daffern, M., & Bucks, R. S. (2012). Emotion regulation and aggression. *Aggression and Violent Behavior, 17*, 72–82. doi:10.1016/j.avb.2011.09.006
- Ruff, R. M., Iverson, G. L., Barth, J. T., Bush, S. S., & Broshek, D. K. (2009). Recommendations for diagnosing a mild traumatic brain injury: A National Academy of Neuropsychology education paper. *Archives of Clinical Neuropsychology, 24*, 3–10. doi:10.1093/arclin/acp006
- Russell, R. T. (2009). Veterans treatment court: A proactive approach. *New England Journal on Criminal and Civil Confinement, 35*, 357–372.
- Savarese, V. W., Suvak, M. K., King, L. A., & King, D. W. (2001). Relationships among alcohol use, hyperarousal, and marital abuse and violence in Vietnam veterans. *Journal of Traumatic Stress, 14*, 717–732. doi:10.1023/A:1013038021175
- Saxon, A. J., Davis, T. M., Sloan, K. L., McKnight, K. M., McFall, M. E., & Kivlahan, D. R. (2001). Trauma, symptoms of posttraumatic stress disorder, and associated problems among incarcerated veterans. *Psychiatric Services, 52*, 959–964. doi:10.1176/appi.ps.52.7.959
- Schubert, C. A., Mulvey, E. P., & Glasheen, C. (2011). Influence of mental health and substance use problems and criminogenic risk on outcomes in serious juvenile offenders. *Journal of the American Academy of Child & Adolescent Psychiatry, 50*, 925–937. doi:10.1016/j.jaac.2011.06.006
- Shaw, D. M., Churchill, C. M., Noyes, R., Jr., & Loeffelholz, P. L. (1987). Criminal behavior and post-traumatic stress disorder in Vietnam veterans. *Comprehensive Psychiatry, 28*, 403–411. doi:10.1016/0010-440X(87)90057-5
- Skeem, J. L., Manchak, S., & Peterson, J. K. (2011). Correctional policy for offenders with mental illness: Creating a new paradigm for recidivism reduction. *Law and Human Behavior, 35*, 110–126. doi:10.1007/s10979-010-9223-7
- Skinner, H. A. (1982). The Drug Abuse Screening Test. *Addictive Behaviors, 7*, 363–371. doi:10.1016/0306-4603(82)90005-3
- Taft, C. T., Kaloupek, D. G., Schumm, J. A., Marshall, A. D., Panuzio, J., King, D. W., & Keane, T. M. (2007). Posttraumatic stress disorder symptoms, physiological reactivity, alcohol problems, and aggression among military veterans. *Journal of Abnormal Psychology, 116*, 498–507. doi:10.1037/0021-843X.116.3.498
- Tanielian, T., & Jaycox, L. (2008). *Invisible wounds of war: Psychological and cognitive injuries, their consequences, and services to assist recovery*. Santa Monica, CA: RAND.
- United States Bureau of Justice Statistics. (2007). *Veterans in state and federal prison, 2004*. Washington, DC: United States Department of Justice.
- Vogt, D., Vaughn, R., Glickman, M. E., Schultz, M., Drainoni, M.-L., Elwy, R., & Eisen, S. (2011). Gender differences in combat-related stressors and their association with postdeployment mental health in a nationally representative sample of U.S. OEF/OIF veterans. *Journal of Abnormal Psychology, 120*, 797–806. doi:10.1037/a002345

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