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# Military veteran involvement with the criminal justice system: A systematic review

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## ABSTRACT

Justice-involved veterans face heightened risk for mental health issues, substance abuse and correlated interaction with the criminal justice system, given the nature of their military service. The purpose of this study is to provide a systematic review of the research involving the correlates of veterans involvement with the criminal justice system, as to date, there are no related publications performing the same task. Results from the systematic review indicated there were three categories of correlates of veteran interaction with the criminal justice system: incarceration, law enforcement, and criminal offending. The systematic review indicated there is a need for early intervention programming for at-risk discharged veterans.

## 1. Introduction

Military veteran involvement with the criminal justice system has become an issue of concern among academics and policymakers in recent years, illustrated most recently by the development of specialized veterans' courts (White et al., 2012). The term *justice-involved veteran* applies to former service members who have been detained by or are under the supervision of the criminal justice system. Justice involvement includes arrest, court involvement, and incarceration in jail or prison. Justice-involved veterans display unique characteristics that make them distinct from other justice-involved adults. Most notably, justice-involved veterans have served in the military and might have experienced combat. Sufficient evidence suggests that veterans are uniquely at risk for arrest and justice system involvement because they have different mental health needs than non-veteran populations (Blodgett et al., 2015). Veterans also face high risk of substance abuse, and can have difficulty adjusting to post-employment civilian life (Canada & Albright, 2014). Finally, statistics show that justice-involved veterans display higher rates of certain types of violent offenses compared to non-veterans, including sexual offenses and intimate partner violence (Blodgett et al., 2015; Marshall et al., 2005; Maruschak et al., 2021).

It is estimated that between 100,000 to 180,000 veterans are incarcerated each year (Bronson et al., 2015; Maruschak et al., 2021; Noonan

& Mumola, 2007). Recent figures from the Bureau of Justice Statistics estimate that over 100,000 veterans were serving time in state ( $N = 96,300$ ) or federal ( $N = 9100$ ) prisons in 2016, with males comprising the majority (98%) of the prison population overall. Figures also indicate that 1 in 4 male veterans in state prisons (28%) and 1 in 5 in federal prisons (21%) were combat veterans. The majority of male veterans incarcerated in state (74%) and federal prisons (77%) were discharged under honorable conditions. Most of the male veterans who were serving time in state prisons in 2016 were incarcerated for violent offenses (69.3%), with approximately a quarter of those cases including violent sexual acts (26.4%). Conversely, at the federal level, approximately 7% of male veterans were serving time for a violent sexual offense compared to 1% of male non-veterans. Most male veterans in federal prisons were incarcerated for public order (33.0%) or drug offenses (29.6%) rather than for violent offenses (24.7%) (Maruschak et al., 2021).

In general, people who come into contact with the criminal justice system exhibit high rates of traumatic experiences and mental health problems. Justice-involved veterans face heightened risk for these issues given the already potentially traumatic nature of their military service (e.g., witness to death and torture of vulnerable populations, potential participation in violent acts) (Blodgett et al., 2015; Noonan & Mumola, 2007). Although most servicemen and women who serve in the military return to civilian life with minimal problems, a small percentage of

veterans are unable to live a productive life because of mental illness, substance abuse, homelessness, and justice system involvement (Blodgett et al., 2015). A greater understanding of the predictive factors that impact justice-involved veterans will contribute to the larger conversation that considers ways to improve policies to best serve military men and women.

## 2. Literature review

A review of the literature indicates that veterans with the greatest risk of justice system involvement are typically male, single, have lower educational attainment (i.e., no achievement past a GED or high school diploma), and mentally ill (Greenberg & Rosenheck, 2009). Research has produced mixed results in regard to the age and race of justice-involved veterans. For example, some studies suggest that the population of veterans at greatest risk for justice system involvement are young (Greenberg & Rosenheck, 2009), others have found that justice-involved veterans tend to be older, with a median age of 10–12 years older than other justice-involved adults (Noonan & Mumola, 2007; White et al., 2012). Figures from 2016 suggest that the average age of male veterans who were incarcerated in state prison was 52 years old, which is 14 years older than the average age of non-veteran state inmates. In comparison, 51 was the average age of veterans incarcerated in federal prisons, which represents an 11 year difference from the average age of non-veteran federal inmates (Maruschak et al., 2021).

In addition, there are mixed results regarding the race of justice-involved veterans. Some studies suggest that the population of veterans at greatest risk for justice system involvement are minorities (Greenberg & Rosenheck, 2009), while others indicate that justice-involved veterans are more likely to be white, non-Hispanic compared to nonveterans (Noonan & Mumola, 2007; White et al., 2012). Recent statistics from 2016 suggest that in both state and federal prisons, half of the veterans were white (50% in state prisons and 24% in federal prisons). About a quarter of male veterans were Black (23% state; 24% federal). Further, Hispanic male veterans comprised 10% of state prisons and 12% of federal prisons (Maruschak et al., 2021).

### 2.1. Predictors of justice system involvement in veteran populations

Predictors of justice system involvement can vary greatly for military personnel because veterans experience different events throughout the duration of their service, particularly in regard to combat experience, trauma, and deployment (Brooke & Gau, 2018). Notably, however, existing research attempting to discern the cause of veterans' criminal justice involvement has resulted in inconclusive findings (Taylor et al., 2012). Moreover, research involving justice-involved veterans is mixed. For example, while Saxon et al. (2001) found that incarcerated veterans report higher rates of lifetime trauma than non-veterans, Tsai et al. (2013) determined that veterans who were involved with recent operations (e.g., Operation Enduring Freedom, Iraqi Freedom, and New Dawn) were less likely to be incarcerated in comparison to other veterans (Tsai et al., 2013).

Regardless of inconclusive findings, recent studies have given insight into factors that contribute to justice-involved veterans (Canada & Albright, 2014). For example, studies have shown that incarcerated veterans report more psychiatric and substance use problems prior to arrest than non-veterans (McGuire et al., 2003). Studies have also found that psychiatric disorders are more common among incarcerated veterans compared to veterans in the community (Black et al., 2005). There is also evidence to suggest that incarcerated veterans have a higher risk of suicide in prison and upon release compared to non-veterans (Frisman & Griffin-Fennell, 2009; Wortzel et al., 2009), and they have a high likelihood of experiencing homelessness upon release from prison (Greenberg & Rosenheck, 2008). Indeed, if a veteran were convicted of a felony offense, they would have an extremely difficult time finding employment and securing benefits, which can result in poverty, and

eventually, reincarceration (Addlestone & Chaset, 2008).

#### 2.1.1. Mental illness

Veterans are especially vulnerable to coming into contact with the criminal justice system because their mental health needs often go unaddressed (Canada & Albright, 2014; GAINS Center, 2008). Notably, veterans present complex rehabilitative needs that require specialized interventions (Williams & Abbrades, 2007). Overall, it is estimated 20% of veterans experience mental health problems, generally in the form of posttraumatic stress disorder (PTSD), major depression, or traumatic brain injury (RAND Corporation, 2008). Veterans also face difficulties returning home from deployment and readjusting to civilian life, especially if they were exposed to combat (Canada & Albright, 2014; Magrunder & Yeager, 2009).

PTSD is one of the most common mental health problems veterans experience. This anxiety disorder occurs after exposure to a traumatic event or injury during combat and is characterized by recurring thoughts or dreams, avoidance of thoughts or feelings of the traumatic event, and anger outbursts (American Psychiatric Association, 2013; Canada & Albright, 2014; Magrunder & Yeager, 2009). More specifically, posttraumatic stress symptoms can be seen in the following clusters: arousal, avoidance, intrusive recollections, and negative mood alteration (American Psychiatric Association, 2013). Research suggests it is these symptoms that significantly affect one's participation in antisocial or criminal behavior. Involvement with trauma or post-traumatic stress (PTS) has been associated with criminal justice involvement and violent behaviors with veteran samples (Bennett et al., 2018; Calhoun et al., 2005; MacManus et al., 2015; Trevillion et al., 2015). For example, Calhoun et al. (2005) found that PTSD in veterans is associated with being arrested upon return from combat deployment. In another study, Bennett et al. (2018) found posttraumatic symptoms, specifically intrusion, were related to violent criminal charges. Furthermore, Elbogen et al. (2010) determined PTS and high combat exposure significantly increased aggression and intimate partner violence in veterans.

PTSD and traumatic brain injury (TBI) are co-occurring disorders, which makes it difficult to distinguish the symptoms (Lew et al., 2009). Like PTS, traumatic brain injury (TBI) is associated with criminal involvement and aggression. TBI is often linked to aggression and impulsivity, therefore increasing the risk for poor decision making and illegal behaviors (Trudel et al., 2007). Tanielian and Jaycox (2008) estimated that 14% of veterans returning home from Afghanistan or Iraq had a brain injury that subsequently led to substance use, difficulty controlling anger, and general aggression, all of which could lead to criminal misconduct. In addition, Elbogen et al. (2012) reported that TBI increased the likelihood of veterans' arrest after deployment.

#### 2.1.2. Substance abuse

Another significant factor of criminal justice system involvement for veterans is substance abuse (Black et al., 2005; Brown, 2011; Erickson et al., 2008a, 2008b; McGuire et al., 2003). Approximately one quarter of veterans in the community have a substance abuse problem or dependence diagnosis (Wagner et al., 2007; Walker et al., 1994). Further, one quarter of incarcerated veterans were using drugs and/or alcohol at the time of their arrest (Noonan & Mumola, 2007). Many mental disorders can co-occur with substance use problems and contribute to behavioral problems like uncontrolled anger or aggression, which can contribute to criminal conduct (Taft et al., 2007). Elbogen et al. (2012) found incarcerated veterans were significantly more likely to support substance abuse compared to veterans who were not incarcerated. Veterans with alcohol and drug abuse history were found to have lengthier criminal histories and longer incarceration periods (Benda et al., 2003; Kasarabada et al., 2000).

To grapple with the myriad of problems associated with justice-involved veterans, researchers have begun to develop preventive and reactive strategies to help servicemen and women. The purpose of this

study is to provide a systematic review of the research involving the correlates of veterans involvement with the criminal justice system. Predictors of these behaviors will be discussed based on the categorization of the terms, as well as the limitations of these studies. The study will conclude with recommendations for future research.

### 3. Methodology

#### 3.1. Initial search

The initial search for empirical studies occurred between March 1, 2021 and November 1, 2021. The extensive literature search was conducted using the following electronic databases, with the indication of peer-reviewed journal articles as a requirement: Academic Search Complete, Criminal Justice Database (ProQuest), EBSCO, Google, JSTOR and PsychInfo.<sup>1</sup> In addition, the reference pages for the studies initially selected were also reviewed for appropriate studies. Based on the terms used in past empirical studies, the following key words and phrases were used in the search: arrest, criminal justice, crime, incarceration, military, and veterans.

#### 3.2. Selection criteria

*Inclusion criteria:* Studies were included if they:

1. Presented data on criminal offending by veterans that resulted in arrest or incarceration.
2. Presented data on criminal offending by veterans that resulted in police contact.
3. Published within the past 20 years, creating a limitation of studies published from 2001 to 2021.

*Exclusion criteria:* Studies were excluded if they:

1. Were not available in English.
2. Were not available in full text.
3. Presented data that did not involve veterans.
4. Presented data that did not involve criminal offending.
5. Presented data that did not involve arrest or incarceration.

#### 3.3. Study characteristics

All the studies that were reviewed examined correlates of criminal justice involvement of veterans. The analysis samples for these studies ranged from 24 to 36,385. The average age of the studies ranged from 27.4 to 58.76 years old.

#### 3.4. Study selection

The literature searches using the search terms outlined above resulted in 34 articles that were deemed appropriate for initial review. After thorough assessment by three reviewers and discussion of each study meeting criteria for inclusion, 14 of the papers were excluded based on the criteria above. Several of the pieces did not specifically involve criminal justice system interactions as a variable under review in

<sup>1</sup> The criminology/criminal justice journals included the following: *Criminal Justice Policy Review*, *International Journal of Offender Therapy and Comparative Criminology*, *Journal of Criminal Justice*, *Justice Quarterly*, and *The Prison Journal*. The psychology journals included the following: *International Journal of Law and Psychiatry*, *Journal of Counseling and Clinical Psychology*, *Journal of Rehabilitation Research and Development*, *Law and Human Behavior*, *Psychiatric Quarterly*, *Psychiatric Rehabilitation Journal*, *Psychological Assessment*, *Psychological Services*, *Traumatology*. The medical journals included the following: *Military Medicine*, *Substance Abuse*.

the study, and were therefore excluded. As a result, 20 studies were utilized in this analysis and can be seen in [Table 1](#). Nine studies examined incarceration as the criminal justice outcome ([Black et al., 2005](#); [Culp et al., 2013](#); [Edwards et al., 2020](#); [Elbogen et al., 2018](#); [Erickson et al., 2008a, 2008b](#); [Finlay et al., 2016](#); [Greenberg & Rosenheck, 2009](#); [Greensberg & Rosenheck, 2012](#); [Tsai et al., 2021](#)). Three studies specifically examined arrest as the dependent variables ([Brooke & Gau, 2018](#); [Elbogen et al., 2012](#); [Miles et al., 2021](#)). The remaining studies examined variables broadly categorized as illegal misconduct or interactions with police/law ([Backhaus et al., 2016](#); [Benda et al., 2003](#); [Bennett et al., 2018](#); [Camins et al., 2021](#); [Elbogen et al., 2014](#); [Larson & Norman, 2014](#); [Logan et al., 2021](#); [Schaffer, 2016](#)).

### 4. Results

[Table 1](#) presents an analysis of each of the studies used in the examination. Included are the analysis used, dependent variable(s) and major findings from each study. Below is a summary of the correlates found in each of the criminal justice interactions by veterans. The categorizations by the researchers and depicted in the tables were based on how the behaviors were labeled in the articles utilized.

#### 4.1. Correlates of behaviors associated with veterans and incarceration

Empirical studies included in this systematic review that correlated behaviors associated with veterans and incarceration ([Table 2](#)) utilized samples with the mean age ranging from 34.96 to 58.76 years of age (multiple studies did not indicate age). All the studies that indicated race/ethnicity and sex asserted the predominant race/ethnicity to be White/non-Hispanic and sex to be male. All used either a paper or online surveys or interviews to gather data for the analysis.

Multiple predictive factors were found to be related to incarceration of veterans. Substance abuse and substance use disorder was significantly related to incarceration in several studies ([Black et al., 2005](#); [Edwards et al., 2020](#); [Erickson et al., 2008a, 2008b](#)). Additionally, substance use was also related to a discharge from the military that was not honorable ([Elbogen et al., 2018](#)). Other factors such as personality disorder and depression ([Black et al., 2005](#); [Edwards et al., 2020](#); [Erickson et al., 2008a, 2008b](#); [Greenberg & Rosenheck, 2009](#)) and low educational attainment were also significant predictors of incarceration of veterans ([Black et al., 2005](#); [Greenberg & Rosenheck, 2009](#)).

One of the studies highlighted in this systematic review specifically examined veteran race/ethnicity and incarceration. [Greensberg and Rosenheck \(2012\)](#) found White veterans were at greater risk of incarceration compared to non veteran Whites. Black and Hispanic veterans were less likely than nonveterans of same race/ethnicity to be incarcerated, but were more likely than White veterans to be incarcerated. [Greensberg and Rosenheck \(2012\)](#) believed these differences in incarceration experiences of races/ethnicities were due to changes in military recruiting practices and access over time. Conversely, [Tsai et al. \(2021\)](#) found Black veterans were more likely to be incarcerated.

#### 4.2. Correlates of behaviors associated with veterans and interactions with law enforcement

Empirical studies included in this systematic review that correlated behaviors associated with veterans and interactions with law enforcement (i.e., arrests, problems with adhering to the law, police contact) ([Table 3](#)) utilized samples with the mean age ranging from 31.31 to 47.49 years of age (multiple studies did not indicate age). All the studies that indicated race/ethnicity and sex asserted the predominant race/ethnicity to be White/non-Hispanic and sex to be male. All used either a paper or online surveys or interviews to gather data for the analysis.

Diagnosis of posttraumatic stress disorder (PTSD) was significantly related to interactions with law enforcement. Some studies found PTSD was significantly related to more frequent interactions ([Backhaus et al.,](#)

**Table 1**  
Selected articles examining correlates of veterans' interaction with criminal justice system.

Study ID	Authors	Study date	Method of data collection	Sample size	Mean age	Predominant sex	Predominant race
1	Backhaus, Gholizadeh, Godfrey, Pittman, & Afari	2016	Questionnaire	1250	31.31	Male	White
2	Benda, Rodell, & Rodell	2003	Interviews	188	44.5	Male	White
3	Bennett, Morris, Sexton, Bonar & Chermack	2018	Survey	697	47.49	Male	
4	Black, Carney, Peloso, Woolson, Letuchy, & Doebbeling	2005	Interview	3695	N/A	Male	White
					<i>Full sample</i> 35.38		<i>Full sample</i> Black
					<i>Non-military</i> 34.39		<i>Non-military</i> Black
					<i>Military</i> 45.36		<i>Military</i> White
5	Brooke & Gau	2018	Surveys and interviews	14,449	45.36	Male	White
6	Camins, Varela, Henderson, Kimbrel, Meyer, Morrissette, & DeBeer	2021	Questionnaire and interview	100	N/A	N/A	N/A
7	Culp, Youstin, Englander, & Lynch	2013	Survey		44.3	Male	Non-Hispanic
8	Edwards, Barnes, Govindarajulu, Geraci, & Tsai	2020	Interviews	3119	58.76	Male	White
9	Elbogen, Johnson, Newton, Straits-Troster, Vasterling, Wagner & Beckham	2012	Survey	1388	36.2	N/A	White
10	Elbogen, Johnson, Newton, Timko, Vasterling, Male, Wagner & Beckham	2014	Longitudinal survey	1090	33	Male	White
11	Elbogen, Wagner, Brancu, Kimbrel, Naylor, Swinkels, VA Mid-Atlantic MIRECC Workgroup, & Fairbank	2018	Interviews	1172	34.96	Male	White
12	Erickson, Rosenheck, Trestman, Ford, & Desai	2008	Secondary data analysis	36,385	57.5	N/A	Unknown
13	Finlay, McGuire, Bronson, & Sreenivasan	2016	Survey and interviews	14,080	N/A	Male	White non-Hispanic
14	Greensberg & Rosenheck	2009	Survey and interviews	6982 4025 (2002 sample) 12,986 (2004 sample)	42.0	N/A	White
15	Greensberg & Rosenheck	2012	Survey and interviews	18,185	N/A	N/A	N/A
16	Larson & Norman	2014	Survey	461	27.4	Male	Caucasian
17	Logan, McNeeley, & Morgan	2021	Secondary data analysis	1346	35	Male	White
18	Miles, Silva, Neumann, Dillahunt-Aspillaga, Corrigan, Tang, Eapen, Blessen, & Nakase-Richardson	2021	Secondary data analysis	948	N/A	Male	White
19	Schaffer	2016	Survey	399	44.6	Male	White
20	Tsai, Edwards, Cao, & Finlay	2021	Structured interviews	36,121	44.3	Male	White

Study ID	Analysis used	Dependent variables	Findings reported by the authors
1	Logistic regression	Problems with adhering to the law	Approximately 35% of the sample of veterans had experienced problems with adhering to the law. Veterans who screened positive for PTSD, military sexual trauma, traumatic brain injury, and clinical levels of pain were significantly related to legal problems.
2	Logistic regression	Criminal offending	Alcohol use, drug abuse and psychiatric hospitalizations were positive significant predictors of a homeless veteran committing at least one crime in the past year. Further, a history of mental illness significantly increased the likelihood of criminal offending.
3	Logistic regression	Violent and nonviolent criminal charges	Post traumatic syndrome was significantly related to violent criminal charges, but not nonviolent charges. Intrusion was also significantly associated with violent offending.
4	Multivariate logistic regression	Any instance of incarceration	Approximately 30% of the sample had been incarcerated prior to the interview. Veterans who had been incarcerated had a higher likelihood of psychiatric and medical comorbidity, as well as higher rates of health care use. Individuals who had ever been incarcerated also were more likely to be male, have lower educational levels, discharge from service, military discipline and/ro use of illegal drugs.
5	Negative binomial regression	Number of lifetime arrests	Inmates who served in the armed forces had 11.5% fewer lifetime arrests. Length of time of service also decreased lifetime arrests. Combat exposure and discharge status had no effect on lifetime arrests. Military service individuals who had PTSD had significantly fewer arrests related to those without any mental health history.
6	Logistic regression	Police contact	Only age was associated with police contact in this sample of veterans, as younger veterans were more likely to have police contact. Combat exposure and PTSD were not significantly related to police contact.
7	Logistic regression	Incarceration	Military service is not predictive of incarceration with consideration of demographic and social integration variables. Service during wartime was inversely related, with those serving post-1973 more likely to be incarcerated compared to those serving in the draft era.
8	Latent class analysis	Suicide attempt, incarceration and homelessness	Results found four classes of veterans: healthy (69% of sample), substance use disorder (16%), personality disorder-substance use disorder (8%), and depressive disorder (7%). Veterans in the personality disorder-substance use disorder class had the highest rates of suicide attempts (27%), incarceration (45%), and homelessness (22%).
9	Logistic regression	Criminal arrest	Veterans with PTSD and negative affect have an increased likelihood of criminal arrest. Criminals' arrests were significantly linked to drug use and criminal history.

(continued on next page)

**Table 1** (continued)

Study ID	Analysis used	Dependent variables	Findings reported by the authors
10	Logistic regression	Violence and aggression	Protective mechanisms in socioeconomic (money to cover basic needs, stable employment), psychosocial (resilience, perceiving control over one's life, social support), and physical (healthy sleep, no physical pain) predicted decreased aggression and violence at follow-up, particularly among higher risk veterans. Veterans endorsing selected protective mechanisms had a 0.17 predicted probability for committing an aggressive act within the following year, whereas those who did not endorse protective mechanisms had a 0.66 predicted probability.
11	Logistic regression	OTH discharge, Incarceration	Veterans who received "Other Than Honorable" OTH discharge were more likely to be younger and have a greater family history of drug abuse and depression compared to veterans who were honorably discharged. Veterans with OTH have lower level of social support, drug use, and incarceration. Drug abuse and incarceration were notably related to OTH discharge.
12	Logistic regression	Incarceration	Substance use disorders and major depression were independently associated with incarceration of veterans. Schizophrenia, personality disorders, and substance use disorders were not independently associated.
13	Logistic regression	Incarceration	Incarcerated veterans had 1.35 higher odds (95% confidence interval [1.12, 1.62], $p < .01$ ) of a sexual offense than incarcerated non-veterans. Among incarcerated veterans, those who were homeless or taking mental health medications at arrest had lower odds and veterans with a sexual trauma history had higher odds of a sexual offense compared to other offense types.
14	Multivariate stepwise regression	Incarceration	The following variables were significant predictors of incarceration for veterans: mental health problems, membership in minority group, single status, lower education attainment.
15	Multivariate logistic regression	Incarceration	Male veterans who are in the age bracket who entered military service in the early years of the All Volunteer Force were at greater risk of incarceration compared to nonveterans. White veterans are at greater risk of incarceration compared to nonveteran Whites. Black and Hispanic veterans were less likely than nonveterans of same race/ethnicity, but more likely than White veterans to be incarcerated. The authors believed these findings were a result of changes in recruiting practices and access over time to different racial and ethnic groups.
16	Stepwise and multivariate logistic regression	Unlawful behavior	PTSD was not a significant predictor of unlawful behavior. Positive alcohol screening and greater combat exposure were significant predictors of unlawful behavior, but marriage and resilience were protective factors.
17	Survival analysis	Recidivism Institutional outcomes	Veterans and non-veterans did not differ in their risk of misconduct, segregation, visitation or treatment participation. TBI nor PTSD were related to measures to institutional adjustment, but both were related to a higher likelihood of recidivism.
18	Multivariate logistic regression	Criminal arrests	Pre-traumatic brain injury (TBI) mental health treatment and pre-TBI heavy alcohol use were significant predictors of post-TBI arrest.
19	Descriptive statistics	Medical problems, Substance Abuse/MH problems, Category of Offenses	Veterans reported having psycho-social problems, diverse levels of criminality, criminogenic needs, and significant episodes of homelessness.
20	Logistic regression	Incarceration	Veteran status was not significantly associated with any lifetime incarceration. Among adults with any lifetime incarceration, veterans were more likely to be male than nonveterans (AOR = 5.90). Otherwise, veterans and nonveterans who received lifetime incarceration were similar in sociodemographic background, physical and mental health, and psychosocial characteristics. Black veterans and nonveterans were moderately associated with lifetime incarceration among both veterans and nonveterans.

**Table 2**  
Correlates of behaviors associated with veterans and incarceration.

Study (N = 9)	Diploma/ GED	Mental illness	Substance abuse
Black et al. (2005)	1	1	1
Culp et al. (2013)	-	-	-
Edwards et al. (2020)	-	1	1
Elbogen et al. (2018)	-	-	1
Erickson et al. (2008a, 2008b)	-	1	1
Finlay et al. (2016)	-	-	-
Greenberg and Rosenheck (2009)	1	1	-
Greensberg and Rosenheck (2012)	-	-	-
Tsai et al. (2021)	-	-	-
<b>n=</b>	<b>2</b>	<b>4</b>	<b>4</b>

Note: All the studies that indicated race/ethnicity and sex asserted the predominant sex to be male and race/ethnicity to be White/non-Hispanic, except for Tsai et al. (2021) who found Black veterans to be predominant in the sample; the average age ranged from 34.96 to 58.76.

2016; Bennett et al., 2018; Elbogen et al., 2012), while Brooke and Gau (2018) found fewer arrests of veterans who exhibited symptoms of PTSD. Backhaus et al. (2016) also found military sexual trauma, traumatic brain injury, and clinical levels of pain were related to veteran interactions with law enforcement. Furthermore, Miles et al. (2021) found veterans who had been arrested and used alcohol heavily pre-traumatic brain injury were more likely to be arrested post-traumatic

**Table 3**  
Correlates of behaviors associated with veterans and interactions with law enforcement.

Study (N = 11)	Diagnosis of PTSD	Military sexual trauma/ TBI/clinical levels of pain	Heavy alcohol use
Backhaus et al. (2016)	1	1	-
Benda et al. (2003)	-	-	-
Bennett et al. (2018)	1	-	-
Brooke and Gau (2018)	-	-	-
Camins et al. (2021)	-	-	-
Elbogen et al. (2012)	1	-	-
Elbogen et al. (2014)	-	-	-
Larson and Norman (2014)	-	-	-
Logan et al. (2021)	-	-	-
Miles et al. (2021)	-	-	-
Schaffer (2016)	-	-	1
<b>n=</b>	<b>3</b>	<b>1</b>	<b>1</b>

Note: All the studies that indicated race/ethnicity and sex asserted the predominant sex to be male and the race/ethnicity to be White/non-Hispanic; the average age ranged from 31.31 to 47.49.

brain injury.

#### 4.3. Correlates of behaviors associated with veterans and criminal offending

Empirical studies included in this systematic review that correlated behaviors associated with veterans and criminal offending (Table 4) utilized samples with the mean age ranging from 33 to 44.6 years of age (multiple studies did not indicate age). These studies that indicated race/ethnicity and sex asserted the predominant race/ethnicity to be White/non-Hispanic and sex to be male. One study utilized a survey, while the other used interviews to gather data for the analysis.

Two of the studies looked specifically at the criminal behavior of homeless veterans. Schaffer (2016) found many veterans exhibit diverse levels of criminality and psycho-social needs in addition to homelessness. Benda et al. (2003) found alcohol use, drug abuse and psychiatric hospitalizations were positive significant predictors of the commission of at least one crime in the past year. Veterans with a history of mental illness also had an increased chance of committing a crime in the past year. Elbogen et al. (2014) examined violent criminality and aggressive criminality of veterans as a whole. They found that increased levels of protective mechanisms, such as social support, stable employment, and physical health decreased likelihood of commission of violent and aggressive acts.

### 5. Discussion

The prevalence of mental health confounded with disinhibitory effects of substance abuse suggests veterans as a subset of the justice-involved veterans who present with mitigating factors and treatment needs. This systematic review identified correlates of behaviors associated with veterans and incarceration, interaction with law enforcement, and criminal offending. While there is no empirical support to suggest mental health has a causal effect on criminal justice involvement, mental illness was found to be a predictive factor within each of the criminal justice interactions. Knowledge of contributory factors to veterans' criminal justice involvement can inform a community-based approach to meeting the mental health needs of veterans who come in contact with the criminal justice system. An understanding and awareness of signs related to combat-related trauma and the role of adaptive behaviors in justice system involvement can aid law enforcement and criminal justice personnel as they encounter veterans with combat-related trauma.

This systematic review highlights areas deserving future research. Awareness of the eligible Veterans Affairs health care services, access to community or mental health resources, and barriers to initiating mental health treatment should be considered. Further research could also consider the differentiation between endorsement of mental health problems prior to enlistment, deployment, and post-deployment. Aspects of deployment, such as duration, multiple deployments, and length between deployment may also warrant further research to better understand the potential contribution to mental health conditions. Finally, for public health and safety reasons, mental health and criminal justice agencies must take the necessary steps to identify justice-involved

**Table 4**  
Correlates of behaviors associated with veterans and criminal offending.

Study (N = 3)	Homeless	Drug/alcohol use	Mental illness
Benda et al. (2003)	1	1	1
Elbogen et al. (2014)	–	–	–
Schaffer (2016)	1	–	–
n=	2	1	1

Note: All the studies that indicated race/ethnicity and sex asserted the predominant sex to be male and the race/ethnicity to be White/non-Hispanic; the average age ranged from 33 to 44.6.

veterans and connect them to comprehensive services.

### 6. Policy implications

Veterans treatment courts (VTCs) are the most recent iteration of the problem-solving court (PSC) model. An interesting departure from other PSCs, VTCs do not focus on one, primary underlying issue, such as substance abuse within drug treatment courts (DTCs) or mental illness within mental health courts (MHCs), but rather focus on a subset of the population, veterans of the armed forces, who have come into contact with the criminal justice system (CJS). Their goal is to use the combined strength of comradery through military service in conjunction with therapeutic jurisprudence and effective intervention to assist justice-involved veterans. Since the beginning of the first VTC in Buffalo, New York in 2008, VTCs have been the fastest growing PSC, with more than 500 currently operating within the United States (Douds et al., 2021; Finlay et al., 2016; Shannon et al., 2017). The proliferation of VTCs suggests a need to recognize the impact military service can have on individuals, particularly if they have experienced combat, as well as challenges when transitioning back to civilian life.

While all VTCs are modeled after the successful DTC model, they do have slight differences, such as the inclusion of peer mentoring programs within the court. The inclusion of mentoring programs within VTCs underscores an important aspect of their ideology; having shared military backgrounds and experiences between the court treatment team, mentors, and participants creates a sense of belonging and comradery that can assist the court participants with their rehabilitative needs, most commonly struggles with substance abuse and addiction. Additionally, the very same behaviors that promote survival in combat may cause difficulty during the post-deployment transition. For example, a GAINS Center report (2008) stated "...hypervigilance, aggressive driving, carrying weapons at all times, and command and control interactions, all of which are beneficial in theater, can result in negative and potentially criminal behavior back home" (p. 5). In conjunction with mental health and substance abuse issues, continued combat behavior places returning veterans are at an increased risk of interacting with the criminal justice system (GAINS Center, 2008).

Research has found that high-rates of substance abuse and addiction have dominated the VTC landscape (Douds & Ahlin, 2019). These rates have been associated with veterans self-medicating to alleviate symptoms of PTSD and TBI, which are considered the signature injuries of the recent wars fought by the United States (Christy et al., 2012). Not only are PTSD and TBI more prevalent in veterans, thus increasing the likelihood of substance use and abuse, they also increase the risk for homelessness, unemployability, and lack of social supports upon leaving the military, all of which increase the likelihood of criminal behavior (Knudsen & Wingenfeld, 2016; Shannon et al., 2017). VTCs aim to address these underlying issues through conjunction with the Veterans Administration (VA) and community treatment options in order to promote prosocial behaviors within the court participants and reduce the prospect of reoffending.

While the empirical evidence of the overall effectiveness of the VTC model is scant given their relative newness, early evaluations have shown positive outcomes for program graduates (see Hartley & Baldwin, 2016). Others have found supporting evidence for their ability to reduce recidivism (Holdbrook & Anderson, 2011; Russell, 2009) and reduced substance use and improve mental health (Knudsen & Wingenfeld, 2016). Unfortunately, utilization of VTCs is low among veterans entering the CJS (O'Hara & Platoni, 2017). This mirrors the research that has found similar levels of low treatment attendance among the overall veteran population; of the OEF/OIF veterans who screened positive for depression or PTSD, only half sought treatment in the preceding 12 months (Tanielian & Jaycox, 2008) and only 30% of Army and Marine Corps veterans with mental health conditions received professional mental health help despite approximately 80% acknowledging a problem during the study period (Hoge et al., 2004). Even among OEF/OIF

veterans receiving VA health care services, only one third of those referred to a VA mental health clinic attended an appointment (Seal et al., 2008). While VTCs can increase treatment compliance through requiring attendance through court orders, if more veterans seek recommended and available treatment prior to CJS involvement, the overall number of veterans entering the CJS would decrease. Overall, VTCs aim to divert justice-involved veterans from incarceration in lieu of community supervision and treatment. While the limited research on their overall effectiveness has shown favorable outcomes, much more research is needed until we can claim victory for the VTC model.

## 7. Conclusion

This systematic review can serve as an important tool for criminal justice practitioners serving justice-involved veterans, as it provides consistent themes of correlates of criminal justice system involvement. The struggles experienced by these veterans are indicative of a need for early intervention resources provided for discharged veterans by military agencies, specifically focusing on coping strategies and mental health, with the intention of addressing risk factors associated with substance abuse, violence, and other antisocial behaviors. Further, for those who do become involved with the criminal justice system, diversionary programs such as veterans treatment courts can provide early intervention for these at-risk veterans. Lastly, it is important to note the small amount of studies performed in this subfield further indicate a need for more research. Continued accumulation of program evaluations can be extremely beneficial in determining how to best address the needs of these veterans who are struggling.

## Declaration of competing interest

There is no conflict of interest for this research project.

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