Experience and Opinions of Forensic Psychiatrists Regarding PTSD in Criminal Cases

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By the end of 2014, 1.5 million veterans of the Second Iraq and Afghan wars were to have returned home, up to 35 percent with PTSD. The potential use of PTSD as the basis for legal claims in criminal defense is therefore a pressing problem. Using a Web-based survey, we examined the experiences and attitudes of members of the American Academy of Psychiatry and the Law (AAPL) regarding PTSD in the criminal forensic setting. Of 238 respondents, 50 percent had been involved in a criminal case involving PTSD, 41 percent in the previous year. Eighty-six percent of cases involved violent crime and 40 percent homicides. Forty-two percent of defendants were soldiers in active service or veterans, of whom 89 percent had had combat exposure, mostly in the Second Iraq and Afghan wars. Outcomes reported were not guilty by reason of insanity (NGRI) (7%), guilty on the original charge (40%), and pleading guilty to a lesser charge (23%). The findings suggest that many forensic psychiatrists will be asked to evaluate PTSD in the criminal setting, with a growing number of cases related to combat exposure in recent veterans. The implications of these findings for the practice of forensic psychiatry are discussed.

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From the 19th century diagnosis of "spinal shock," introduced in civil litigation after railway accidents, to "shell shock" disability claims from the First World War, psychological trauma has a long history in modern medicine and the law.[1] Indeed, the understanding of traumatic stress has both influenced and been influenced by the law.[2] Since the introduction of posttraumatic stress disorder (PTSD) as a formal diagnosis in Diagnostic and Statistical Manual of Mental Disorders, Third Edition (DSM-III) in 1980,[3] it has been invoked in a variety of legal settings, including the civil and criminal arenas.[4] Among the legal claims made in the criminal setting based on PTSD are incompetence to stand trial (IST), diminished responsibility for criminal behavior (DR), not guilty by reason of insanity (NGRI), automatism (unconsciousness), and self-defense, and it is used for purposes of mitigation at sentencing.[5–7]

Since the return of the United States to a war footing after September 11, 2001, the matter of PTSD in the criminal forensic setting has taken on new urgency.[7] Approximately 2.2 million service personnel have served in Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF), with rates of PTSD estimated to be as high as one in five.[8,9] Moreover, underuse of mental health services by veterans likely leads to worse outcomes that may have been prevented with earlier detection and treatment.[10]

There has been evidence that military veterans, those with PTSD in particular, are more prone to involvement with the criminal justice system than their nonveteran peers.[11,12] Veterans are estimated to comprise almost 12 percent of the U.S. jail population[13] and 10 percent of the prison population.[14] Among the hypotheses invoked to explain criminal justice involvement of veterans have been increased anger and irritability due to PTSD.[15] Dissociation

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and flashbacks have been hypothesized to lead to violence caused by a loss of touch with reality and vivid re-experiencing of combat or other traumatic situations.[6] This level of mental disturbance has been suggested as a requirement for the use of PTSD as an insanity defense.[16] PTSD-associated hypervigilance (without loss of reality testing) and irritability have also been linked to violence and may lend themselves to arguments of diminished responsibility.[17] In the popular perception fueled by media reports, combat experiences are linked to veterans' violent crimes.[18] Other researchers have found an association between a preservice history of adversity and postservice PTSD,[19,20] with some investigators arguing that these preservice risk factors may be more significant contributors to subsequent veteran criminal involvement than PTSD itself.[15]

One response to the link between PTSD and criminal behavior has been the development of Veterans Treatment Courts (VTCs), which seek to replace prison sentences for nonviolent offenders with mandated psychiatric treatment, rehabilitation, and social services.[21] Advocates have emphasized that veterans, particularly combat veterans, are a population with special vulnerabilities and needs.[22] Especially when the veteran facing charges is a decorated war hero, the cry for justice to take into account the psychological impact of war experiences is great.[23] It is likely that in the coming years an increasing number of veterans involved in the criminal justice system will invoke PTSD at some point in their legal proceedings.

Given the ubiquity of trauma and the subjectivity of PTSD symptoms, some legal[24] and psychiatric[25] observers have expressed concern about a possible inflation in legal claims based on PTSD. Others have argued that fairness for trauma survivors involved in the criminal justice system cannot be achieved without taking into account the impact of PTSD on emotion and behavior.[26] Several high-profile cases involving PTSD that were subsequently found to be based on fraudulent histories of trauma, however, have brought attention to the possible misuse of PTSD evidence in legal settings.[27]

Notwithstanding the concerns and controversies around PTSD in the criminal legal setting, surprisingly little data are available about its use. In a study of PTSD and the insanity defense in eight states, comprising a sample of more than 8,000 insanity pleas, the rate of NGRI claims based on PTSD was exceedingly low (0.3%), and those making this argument were no more successful than other insanity defense claimants.[28] A review of appellate case law suggests that legal arguments based on PTSD have had mixed reception in the courts, with appellate courts at times affirming trial courts' exclusion of PTSD evidence and broadly questioning whether PTSD meets the standard for an insanity defense and, at other times, reversing trial court decisions to exclude PTSD from jury instructions. Courts have had similar mixed reactions to PTSD-based claims of unconsciousness, self-defense, and mitigation at sentencing.[5] Because trial court proceedings are not tracked systematically, it is difficult to know how often PTSD-related evidence leads to successful plea-bargaining or to charges being dropped, although there are reports of such cases.[29,30]

To the authors' knowledge, no previous study has queried a large group of forensic psychiatrists about their experience in the criminal setting with PTSD. Given the historic importance of this diagnosis and its increasing relevance in the wake of U.S. military engagements abroad, forensic psychiatrists' experience with PTSD in the criminal setting and their knowledge and opinions of its role in legal proceedings may be helpful in understanding the nature of its use and the issues raised. The present study therefore examines the experiences and views of forensic psychiatrists regarding PTSD.

Specifically, the present study was descriptive and was conducted to investigate the proportion of U.S. forensic psychiatrists who report participation in criminal cases involving PTSD-based defense claims; characteristics of the criminal defendants, including demographics, clinical variables, veteran status, combat exposure, and presence of PTSD; experiences and attitudes of forensic psychiatrists with respect to their practice, methods, and perceptions of PTSD diagnoses in criminal contexts; legal variables of the cases, including charges faced by the defendant, when and how expert opinions were used, and legal outcomes.

Materials and Methods

Subjects

Participants in the study were identified with the assistance of the American Academy of Psychiatry and the Law (AAPL), the largest organization of forensic psychiatrists in the United States. At the time

of this study, AAPL had 1,890 members, approximately 200 of whom were trainees (residents or forensic fellows). The target population for this study comprised the 1,660 members on AAPL's e-mail distribution list.

Survey Development

Survey development was informed by a review of the literature on PTSD in the criminal forensic setting. English-language articles in PubMed were identified with the terms "PTSD," "forensic psychiatry," and "criminal." Relevant articles from law reviews were identified in LexisNexis using the terms "PTSD" and "criminal defense." Based on the psychiatric and legal literature reviewed, themes relating to PTSD in the criminal setting were identified, and draft survey questions were formulated regarding each theme, including: psychiatrist-respondent characteristics, defendant demographics, clinical characteristics, diagnostic and assessment concerns, legal setting and context of the case, legal proceedings, and legal outcomes.

To minimize respondent recall bias, the survey focused on psychiatrists' most recent criminal case involving PTSD. In addition, questions were included that addressed controversies regarding the diagnosis of PTSD and its use in the criminal forensic setting. To compare findings across subjects from different periods, respondents were asked to use Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision (DSM-IV-TR)[32] criteria when responding to the survey (at the time of the study DSM-5 had not yet been released).

Once the survey draft was completed, it was piloted for clarity with a psychiatry resident with forensic interests, two forensic psychiatry fellows, and an experienced forensic psychiatrist. Based on their feedback, changes were incorporated to increase clarity and reduce redundancy.

Procedures

An e-mail invitation containing a link to the SurveyMonkey.com website was distributed. Two weeks later, a reminder e-mail was sent. Potential respondents who accessed the survey site viewed an explanation of the study and were told that clicking "continue" indicated their consent to participate. The study was approved by the institutional review board (IRB) of the New York State Psychiatric Institute.

Data Analysis

Survey responses were downloaded from SurveyMonkey and uploaded to IBM SPSS, version 20. Statistical analyses were conducted with Pearson's goodness-of-fit chi square, Fisher's exact chi square (for data with fewer than five expected responses), and log-linear regression. To deal with missing data across questions, the percentages reported below are based on the number of responses to each item.

Qualitative data elicited from respondents were reviewed, and responses were grouped into themes that emerged from the data and were used to illustrate the responses to the survey questions.

Results

Respondent Characteristics

Of the 1,660 AAPL members who received an e-mail invitation, 238 (14.3%) responded. Respondent characteristics are detailed in Table 1. Of note, 39 percent ($n = 67$) had more than 20 years' experience in forensic psychiatry, and 80 percent ($n = 141$) had performed forensic evaluations in criminal cases. With regard to experience with PTSD in particular, half of the respondents (50%, $n = 120$) reported involvement in at least 1 criminal case where PTSD was raised as part of a legal argument, and 30 percent ($n = 33$) had been involved in more than 10 cases. In their most recent PTSD-related cases, 53 percent ($n = 57$) were retained by the defense and 14 percent ($n = 15$) by the prosecution; 33 percent ($n = 35$) were court appointed (see Table 5).

Table 1 Characteristics of Respondent Forensic Psychiatrists

Characteristic (number responding)	Percentage of Group
Years in practice ($n = 172$)	
<6	21 (36)
6–10	12 (21)
11–20	26 (45)
>20	39 (67)
Fellow	2 (3)
Retaining party ($n = 176$)	
Defense	27 (47)
Prosecution	10 (17)
Both equally	44 (78)
Does not perform criminal forensic evaluations	19 (34)
Retained in a criminal case involving PTSD ($n = 238$)	50 (120)
Number of cases involving PTSD ($n = 109$)	
1–5	53 (58)
6–10	17 (18)
>10	30 (33)

Data are expressed as the percentage of the group of respondents (*n*).

Defendant Characteristics

Characteristics of defendants in the most recent PTSD-related case reported by respondents are shown in Table 2. A large majority of cases had been tried in the past four years (82%, $n = 90$). Most of the defendants were young, with no significant difference in age in relation to combat exposure. Most defendants were male (85%, $n = 90$) and white (71%, $n = 75$), with significantly more men and whites (fewer Hispanics) in the combat-exposed group. As expected, an overwhelming proportion of combat-exposed defendants were armed services veterans, although there were veterans who claimed exposure to noncombat trauma and nonveterans who claimed combat exposure. Most combat-exposed defendants (total respondents, $n = 38$) were veterans of Operation Iraqi Freedom (45%, $n = 17$), Operation Enduring Freedom (22%, $n = 8$), or the Vietnam War (19%, $n = 7$).

The majority of charges (86%, $n = 92$) were for violent crimes, 40 percent ($n = 43$) of them homicides, without significant differences based on combat exposure. Nineteen percent ($n = 20$) of defendants were reported to have made legal claims based on PTSD, with combat-exposed defendants being more likely to have done so.

Assessment of Reported Trauma

Defendants' reported traumatic experiences are detailed in Table 3. The most common reported cause of PTSD was combat exposure (37%, $n = 38$), followed by civilian violence (25%, $n = 26$). Thirty percent ($n = 24$) of respondents were physically injured by the trauma, and 13 percent ($n = 10$) sustained traumatic brain injury (TBI). Combat-exposed defendants were more likely to have TBI.

Although the majority of respondents (60%, $n = 59$) assessed defendants to be accurate reporters of symptoms, that assessment was more likely to be applied to combat-exposed defendants. Of combat-exposed defendants, those with TBI (with or without additional physical injuries) were all deemed to be accurate reporters ($n = 6$), and those with physical

Table 2 Reported Characteristics of Criminal Defendants in Respondents' Most Recent Cases Involving PTSD

	Combat Exposed	Noncombat Exposed	Total	Combat vs. Noncombat
Case occurrences (years ago)	($n = 38$)	($n = 64$)	($n = 109$)	χ^2 4.53, $df = 3$, $p = .210$*
<1	34 (13)	42 (27)	41 (45)	
1–4	55 (21)	38 (24)	41 (45)	
4–10	5 (2)	16 (10)	13 (14)	
>10	5 (2)	5 (3)	5 (5)	
Age	($n = 35$)	($n = 59$)	($n = 100$)	$\chi^2 = 0.832$, $df = 2$, $p = .660$*
18–39	69 (24)	61 (36)	64 (64)	
40–64	28 (10)	37 (22)	33 (33)	
>65	3 (1)	2 (1)	3 (3)	
Gender	($n = 36$)	($n = 64$)	($n = 106$)	$\chi^2 = 6.59$, $df = 1$, $p = .01$†
M	97 (35)	78 (50)	85 (90)	
F	3 (1)	22 (14)	15 (16)	
Race	($n = 37$)	($n = 63$)	($n = 106$)	$\chi^2 = 9.036$, $df = 1$, $p = .003$†
White	83 (31)	63 (40)	71 (75)	
Black	11 (4)	27 (17)	22 (23)	
Asian	3 (1)	5 (3)	4 (4)	
Native American/Alaskan	0 (0)	3 (2)	2 (2)	
Other	3 (1)	2 (1)	1 (2)	
Hispanic	($n = 33$)	($n = 65$)	($n = 107$)	$\chi^2 = 4.19$, $df = 1$, $p = .041$†
	6 (2)	20 (13)	14 (15)	
Armed services veteran	($n = 37$)	($n = 64$)	($n = 103$)	$\chi^2 = 54.47$, $df = 1$, $p < .0001$†
	89 (33)	14 (9)	42 (43)	
Charges	($n = 37$)	($n = 61$)	($n = 107$)	$\chi^2 = 2.63$, $df = 2$, $p = .269$*
Homicide	30 (11)	42 (26)	40 (43)	
Other violent	59 (22)	42 (26)	46 (49)	
Nonviolent	11 (4)	16 (9)	14 (15)	
Previous legal claims based on PTSD	($n = 37$)	($n = 64$)	($n = 107$)	$\chi^2 = 4.11$, $df = 1$, $p = .043$†
Yes	35 (13)	11 (7)	19 (20)	
No	54 (20)	70 (45)	66 (71)	
Don't know	11 (4)	19 (12)	15 (16)	

Data are expressed as the percentage of the group of respondents (n).
* Log-linear regression.
† Pearson's goodness of fit.

Table 3 Etiology of Reported Trauma and Assessment Methods

	Combat Exposed	Noncombat Exposed	Total	Combat vs. Noncombat
Nature of trauma	(*n* = 38)	(*n* = 62)	(*n* = 104)	χ^2 = 132.81, *df* = 4, *p* = <.0001*
Combat	100 (38)	0	37 (38)	
Accident	0	8 (5)	5 (5)	
Violence victim	0	37 (23)	25 (26)	
Witness	0	23 (14)	14 (15)	
Sexual/physical abuse	0	32 (20)	19 (20)	
Physically injured by trauma†	(*n* = 36)	(*n* = 43)	(*n* = 79)	χ^2 = 2.1, *df* = 1, *p* = .149
Yes	22 (8)	34 (16)	30 (24)	
No	78 (28)	66 (27)	70 (55)	
TBI Sustained	(*n* = 36)	(*n* = 43)	(*n* = 79)	χ^2 = 8.5, *df* = 1, *p* = .0036‡
Yes	17 (6)	9 (4)	13 (10)	
No	83 (30)	82 (35)	82 (65)	
Don't know	0	9 (4)	5 (4)	
Assessment of reliability	(*n* = 38)	(*n* = 58)	(*n* = 98)	χ^2 = 6.07, *df* = 2, *p* = .048*
Accurate reporter	76 (29)	52 (30)	60 (59)	
Exaggerating	13 (5)	26 (15)	22 (21)	
Malingering	11 (4)	22 (13)	18 (18)	
Structured assessment of PTSD used§	(*n* = 38)	(*n* = 58)	(*n* = 100)	χ^2 = .159, *df* = 1, *p* = .69
	16 (6)	19 (11)	18 (18)	
Persons interviewed‖	(*n* = 36)	(*n* = 58)	(*n* = 94)	
Family members	44 (16)	36 (21)	39 (37)	χ^2 = .632, *df* = 1, *p* = .427
Spouse/partner	22 (8)	16 (9)	18 (17)	χ^2 = .674, *df* = 1, *p* = .412
Friends	19 (7)	9 (5)	13 (12)	χ^2 = 2.34, *df* = 1, *p* = .126
Witnesses of trauma	6 (2)	16 (9)	12 (11)	χ^2 = 2.13, *df* = 1, *p* = .144
Other¶	33 (12)	19 (11)	24 (23)	χ^2 = 2.48, *df* = 1, *p* = .115
None	42 (15)	57 (33)	53 (50)	χ^2 = 2.06, *df* = 1, *p* = .151
Documents reviewed‖	(*n* = 36)	(*n* = 58)	(*n* = 94)	
Health records	81 (29)	88 (51)	85 (80)	χ^2 = 0.953, *df* = 1, *p* = .329
Criminal records	50 (18)	62 (36)	61 (57)	χ^2 = 1.32, *df* = 1, *p* = .250
Military records	67 (24)	9 (5)	31 (29)	χ^2 = 35.1, *df* = 1, *p* < .0001
Employment records	28 (10)	28 (16)	30 (28)	χ^2 = .0004, *df* = 1, *p* = .984
Other#	67 (24)	64 (37)	65 (61)	χ^2 = .081, *df* = 1, *p* = .777
None	8 (3)	2 (1)	4 (4)	χ^2 = 2.38, *df* = 1, *p* = .155**

Data are expressed as the percentage of the group of respondents (*n*).
* Log-linear regression.
† Does not include TBI.
‡ Chi square test, excluding "don't know" responses.
§ SCID, CAPS, and PTSD checklist.
‖ Respondents instructed to choose as many categories as applicable.
¶ Employer or coworkers, other military personnel, schoolmates, law enforcement, Catholic Archdiocese, prior psychiatric/medical providers, crime witnesses (some categories provided by respondents).
# Past litigation records, photographs, school records, workers compensation records, child protective services records, police reports, social security reports, defendant personal writings, jail records, police interrogation videos (some categories provided by respondents).
** Fisher's exact test.

injuries but not TBI ($n = 4$) were deemed either to be reporting accurately ($n = 3$) or exaggerating symptoms ($n = 1$). Of those combat-exposed defendants without TBI or physical injuries ($n = 26$), 3 were deemed to be malingering (12%), 4 exaggerating symptoms (15%), and 19 accurate (73%).

When broken down according to the retaining party, 38 percent ($n = 5/13$) of psychiatrists retained by the prosecution thought that the defendant was malingering, compared with only 6 percent ($n = 3/50$) of those retained by the defense ($p = \chi^2 = 15.1$, $df = 2$, $p = .0053$); psychiatrists retained by the defense were not more likely to have seen combat-exposed defendants; hence, the relationship between combat exposure and perceived accuracy in reporting cannot explain the finding.

Structured assessments of PTSD were used in a minority of cases (18%, $n = 18$). About half of the psychiatrists did not interview any third parties in their assessment of the defendant's mental health claims. Of those who interviewed third parties, family members (39%, $n = 37$) were the ones most commonly interviewed. Only 6 percent of psychiatrists ($n = 2$) interviewed former military personnel regarding the purported trauma of defendants in the combat-exposed group.

Forensic Assessment Findings

Respondents' findings on forensic assessment are shown in Table 4. Twenty-one percent of defendants ($n = 22$), including significantly more of the combat-exposed defendants, were said to be in mental health treatment at the time of the offense. Thirty-nine percent ($n = 41$) were reported to have been intoxicated at the time of the offense, most with alcohol. With regard to diagnosis, 61 percent of respondents found that the defendant met DSM-IV-TR criteria for PTSD ($n = 61$); subthreshold diagnoses (7%, $n = 7$) were uncommon. An association was observed between retaining side and diagnosis, with 81 percent ($n = 42/52$) of defense-retained psychiatrists diagnosing PTSD compared with 36 percent ($n = 5/14$) of prosecution-retained psychiatrists ($\chi^2 = 10.92$, $df = 1$, $p = .00095$).

Among those defendants who were not deemed to meet the DSM-IV-TR criteria for PTSD, respondents were asked to indicate which criteria were missing. Most often cited were avoidance of stimuli associated with the trauma or numbing (56%, $n = 22/39$), persistent reliving of the traumatic event (54%, $n = 21/39$), and increased arousal (41%, $n = 16/39$). The most common diagnosis other than PTSD was substance abuse (37%, $n = 38$), followed by major depressive disorder (19%, $n = 20$). About one in five defendants (23%, $n = 23$) was diagnosed as having a personality disorder. There were no significant differences in diagnosis based on combat exposure.

Legal Variables

Respondents' reports regarding legal aspects of the cases are shown in Table 5. A significantly greater proportion of combat-exposed defendants (49%, $n = 17$ versus 25%, $n = 15$) pursued the insanity defense. Eighty percent ($n = 63$) presented evidence of PTSD at sentencing for mitigation purposes. Evidence regarding PTSD was most frequently introduced in the pretrial phase (67%, $n = 72$), although it was also often introduced at trial and at sentencing. Respondents were

Table 4 Respondents' Findings on Forensic Assessment

	Combat Exposed	Non-Combat Exposed	Total	Combat vs. Non-Combat
In mental health treatment at time of alleged offense	($n = 37$)	($n = 63$)	($n = 103$)	
Yes	35 (13)	14 (9)	21 (22)	$\chi^2 = 5.088$, $df = 1$, $p = .024$*
Treated with medication†	35 (13)	14 (9)	20 (21)	$\chi^2 = 5.08$, $df = 1$, $p = .024$
Treated with psychotherapy†	16 (6)	3 (2)	8 (8)	$\chi^2 = 4.90$, $df = 1$, $p = .0270$
No	65 (24)	79 (50)	74 (76)	
Don't know	0 (0)	6 (4)	5 (5)	$\chi^2 = 2.45$, $df = 1$, $p = .118$
Intoxicated at time of alleged offense	($n = 37$)	($n = 63$)	($n = 106$)	
Yes‡	43 (16)	38 (24)	39 (41)	$\chi^2 = .266$, $df = 1$, $p = .606$
No	46 (17)	51 (32)	50 (53)	
Don't know	11 (4)	11 (7)	11 (12)	$\chi^2 = .002$, $df = 1$, $p = .963$
	($n = 38$)	($n = 60$)	($n = 100$)	
PTSD Diagnosis§	68 (26)	57 (34)	61 (61)	$\chi^2 = .941$, $df = 1$, $p = .332$
Subthreshold PTSD Diagnosis	5 (2)	8 (5)	7 (7)	$\chi^2 = .381$, $df = 1$, $p = .565$
Other diagnosis‖	($n = 38$)	($n = 64$)	($n = 104$)	
Substance abuse	47 (18)	31 (20)	37 (38)	$\chi^2 = 2.65$, $df = 1$, $p = .104$
MDD	21 (8)	17 (11)	19 (20)	$\chi^2 = .240$, $df = 1$, $p = .628$
Psychotic disorder	11 (4)	3 (2)	6 (6)	$\chi^2 = 2.40$, $df = 1$, $p = .125$
Other¶	47 (18)	42 (27)	43 (45)	$\chi^2 = .260$, $df = 1$, $p = .610$
None	24 (9)	14 (9)	19 (20)	$\chi^2 = .192$, $df = 1$, $p = .661$
Don't know	8 (3)	16 (10)	13 (14)	$\chi^2 = 1.28$, $df = 1$, $p = .258$
Personality disorder	($n = 36$)	($n = 63$)	($n = 102$)	
Yes	17 (6)	25 (16)	23 (23)	$\chi^2 = 2.372$, $df = 1$, $p = .124$
No	61 (22)	40 (25)	48 (49)	
Don't know	22 (8)	35 (22)	29 (30)	$\chi^2 = 1.75$, $df = 1$, $p = .186$

Data are expressed as the percentage of the group of respondents (*n*).
* Chi square test performed on "yes" vs. "no" responses; "don't know" responses were excluded.
† Respondents instructed to answer as many as applied.
‡ Combat exposed: alcohol 38% (14), crystal meth 5% (2). Noncombat exposed: 29% (18), crack cocaine 13% (8). Total: alcohol 30% (32), crack cocaine 8% (8).
§ According to DSM-IV-TR PTSD criteria.
‖ Respondents instructed to choose as many diagnoses as applied.
¶ Other anxiety disorder, dissociative disorder, bipolar affective disorder, attention deficit hyperactivity disorder, pedophilia, intermittent explosive disorder, dysthymic disorder, Tourette's disorder, adjustment disorder, cognitive disorder.

Table 5 Legal Variables in Respondents' Most Recent Criminal Forensic Case Involving PTSD

	Combat Exposed	Noncombat Exposed	Total	Combat vs. Noncombat
Retaining agent	(*n* = 38)	(*n* = 63)	(*n* = 107)	χ^2 = 1.179, *df* = 2, *p* = .56*
Defense	50 (19)	53 (34)	53 (57)	
Court	40 (15)	30 (19)	33 (35)	
Prosecution	11 (4)	16 (10)	14 (15)	
Defense claim†	(*n* = 35)	(*n* = 59)	(*n* = 97)	
Not guilty by reason of insanity	49 (17)	25 (15)	34 (33)	χ^2 = 5.24, *df* = 1, *p* = .022
Diminished responsibility	37 (13)	44 (26)	41 (40)	χ^2 = .434, *df* = 1, *p* = .510
Other legal claims†	(*n* = 28)	(*n* = 48)	(*n* = 79)	
Mitigation	86 (24)	77 (37)	80 (63)	χ^2 = .832, *df* = 1, *p* = .362
Incompetent to stand trial	4 (1)	16 (8)	11 (9)	χ^2 = 2.90 *df* = 1, *p* = .0883
Other‡	18 (5)	15 (7)	18 (14)	χ^2 = .143, *df* = 1, *p* = .706
Stages psychiatric evidence introduced†	(*n* = 37)	(*n* = 62)	(*n* = 107)	
Pretrial	68 (25)	66 (41)	67 (72)	χ^2 = .022, *df* = 1, *p* = .883
Trial	41 (15)	36 (22)	37 (40)	χ^2 = .253, *df* = 1, *p* = .615
Sentencing	30 (11)	40 (25)	36 (38)	χ^2 = .608, *df* = 1, *p* = .436
Expert's opinion on legal claim	(*n* = 37)	(*n* = 58)	(*n* = 98)	
Valid	60 (22)	47 (27)	50 (49)	χ^2 = 1.510, *df* = 1, *p* = .220
Invalid	40 (15)	53 (31)	50 (49)	
Opposing expert retained	(*n* = 37)	(*n* = 60)	(*n* = 101)	
Yes	24 (9)	38 (23)	34 (34)	χ^2 = 2.03, *df* = 1, *p* = .154
No	35 (13)	25 (15)	29 (29)	
Don't know	22 (8)	23 (14)	23 (23)	χ^2 = .0382, *df* = 1, *p* = .845
Not applicable	19 (7)	13 (8)	15 (15)	χ^2 = .546, *df* = 1, *p* = .460
Agreement between opposing experts	(*n* = 9)	(*n* = 23)	(*n* = 34)	
PTSD present				
Yes	89 (8)	26 (6)	41 (14)	χ^2 = 6.801, *df* = 1, *p* = .014§
No	11 (1)	48 (11)	41 (14)	
Don't know	0 (0)	26 (6)	18 (6)	χ^2 = 2.89, *df* = 1, *p* = .0891
Legal claim				
Yes	56 (5)	35 (8)	41 (14)	χ^2 = 1.16, *df* = 1, *p* = .282
No	33 (3)	39 (9)	38 (13)	
Don't know	11 (1)	26 (6)	21 (7)	χ^2 = .849, *df* = 1, *p* = .357

Data are expressed as the percentage of the group of respondents (*n*).
* Log-linear regression.
† Respondents instructed to select as many as applied.
‡ Plea-bargaining and charges dropped.
§ Fisher's exact test.

evenly divided (50%, *n* = 49) between those who concluded that the defendant's legal claim based on PTSD was valid and those who believed it was invalid. When analyzed according to retaining side, only 21 percent (*n* = 3/14) of prosecution-retained psychiatrists believed the legal claim was valid, compared with 71 percent (*n* = 36/51) of defense-retained psychiatrists (χ^2 =11.06, *df* = 1, *p* = .0009).

In cases where an opposing expert was known to have been retained, 41 percent of respondents (*n* = 14) had agreed with the opposing expert regarding the presence of PTSD. Respondents were more likely to report agreement on the diagnosis of PTSD when the defendant was combat exposed. Opposing experts agreed on the validity of the defendant's legal claim in 41 percent (*n* = 14) of cases, with no significant differences based on combat exposure. Agreement between experts on the diagnosis correlated with agreement on the legal claim: in 11 of 13 cases (85%) where experts agreed on the diagnosis, they agreed on the legal claim, whereas in only 2 of 11 cases where they disagreed on diagnosis did they agree on the legal claim (18%) (χ^2 =11.6, *df* = 1, *p* = .0006).

Legal Outcomes

The respondents' report of the cases' legal outcomes is shown in Table 6. The most frequent legal outcome was a finding of guilt on the original charge (40%, *n* = 38), followed by pleading guilty to a lesser charge (23%, *n* = 22). Seven defendants (7%) were found NGRI, and one (1%) was found guilty but mentally ill (GBMI). There were no significant differences in legal outcome based on combat exposure. Thirty percent (*n* = 28) of defendants were reported to have received mitigation because of the PTSD-

Table 6 Legal Outcomes Reported by Respondents Regarding the Most Recent Criminal Case Involving PTSD as a Legal Claim

	Combat Exposed % (*n*)	Noncombat Exposed % (*n*)	Total % (*n*)	Combat vs. Noncombat
Went to trial	(*n* = 37)	(*n* = 64)	(*n* = 108)	
Yes	32 (12)	41 (26)	39 (42)	$\chi^2 = .400$, $df = 1$, $p = .527$
No	41 (15)	38 (24)	37 (40)	
Unknown	27 (10)	22 (14)	24 (26)	$\chi^2 = .344$, $df = 1$, $p = .558$
Type of trial	(*n* = 12)	(*n* = 26)	(*n* = 41)	
Judge	17 (2)	39 (10)	29 (12)	$\chi^2 = 2.25$, $df = 1$, $p = .134$
Jury	83 (10)	53 (14)	66 (27)	
Don't know	0 (0)	8 (2)	5 (2)	$\chi^2 = .974$, $df = 1$, $p = .324$
Outcome*	(*n* = 36)	(*n* = 56)	(*n* = 95)	
NGRI	11 (4)	5 (3)	7 (7)	$\chi^2 = 1.02$, $df = 1$, $p = .313$
Lesser charge	19 (7)	27 (15)	23 (22)	$\chi^2 = .775$, $df = 1$, $p = .379$
Guilty	38 (14)	39 (22)	40 (38)	$\chi^2 = .009$, $df = 1$, $p = .924$
GBMI	3 (1)	0	1 (1)	$\chi^2 = 1.56$, $df = 1$, $p = .212$
Charges dismissed	8 (3)	4 (2)	5 (5)	$\chi^2 = .952$, $df = 1$, $p = .329$
Innocence	0 (0)	2 (1)	1 (1)	$\chi^2 = .660$, $df = 1$, $p = .416$
Don't know	21 (8)	23 (13)	23 (22)	$\chi^2 = .012$, $df = 1$, $p = .912$
Mitigation	(*n* = 36)	(*n* = 55)	(*n* = 94)	
Yes	39 (14)	25 (14)	30 (28)	$\chi^2 = 3.05$, $df = 1$, $p = .081$
No	14 (5)	27 (15)	22 (21)	
Don't know	33 (12)	36 (20)	35 (33)	$\chi^2 = .035$, $df = 1$, $p = .851$
Not applicable†	14 (5)	11 (6)	13 (12)	

Data are expressed as the percentage of the group of respondents (*n*).
* Respondents instructed to choose as many as applied.
† Defendant found innocent, NGRI, or charges dismissed.

related claim. In roughly a third of cases (35%, $n = 33$), however, respondents did not know whether mitigation occurred.

Views on DSM-IV-TR PTSD Criteria

Respondents were asked about their level of satisfaction with the DSM-IV-TR criteria for PTSD. Of 178 respondents, most were moderately satisfied (47%, $n = 84$) or somewhat satisfied (23%, $n = 41$). Only 15 percent ($n = 27$) were very satisfied, and 15 percent ($n = 27$) were slightly or not at all satisfied. Of 180 comments made about the criteria, concerns reflected four main themes, with the criteria characterized as overly broad or too narrow; too easily malingered; too subjective; or inadequate to capture the complexity of PTSD phenomena for forensic purposes.

PTSD Criteria Too Broad (17%, n = 30)

Typical comments:

It's too broad and overlaps depression/anxiety.

Fits too many people.

High sensitivity but little specificity.

PTSD Criteria Too Narrow (12%, n = 21)

Typical comments:

Overall, this seems to capture the experience of the illness. My only dissatisfaction is the requirement that a person MUST have one of each category. There are people with clear trauma who meet partial but not full criteria yet are very impaired by their condition.

Many people may not meet criteria for PTSD according to the DSM but may still have severe symptoms that require treatment. This doesn't make a huge difference in the clinical setting but in the forensic setting (both criminal and civil) this can be difficult to convey to the court and what exactly it means with regards to impact on behavior or compensation.

Consistent with concerns about the breadth of the criteria, when asked to indicate whether in their opinion PTSD is overdiagnosed or underdiagnosed in the criminal forensic setting, of 171 respondents, only 24 percent ($n = 41$) answered neither over- nor underdiagnosed. Fifty-nine percent ($n = 101$) stated that it was greatly or somewhat overdiagnosed. In contrast, 17 percent ($n = 29$) thought it was somewhat or greatly underdiagnosed.

Ease of Malingering (9%, n = 17)

Typical comments:

From a forensic psychiatric perspective, many symptoms are subjective and hard to verify. The potential for fabrication and exaggeration is significant.

I think the criteria are too widely known and are thus easy to use in cases of malingering.

Consistent with these comments, in a separate question, out of 178 respondents, only 14 percent stated they were very confident in their ability to rule out malingering of PTSD in the criminal forensic setting, 48 percent ($n = 85$) were moderately confident, 26 percent ($n = 47$) somewhat confident, and 12 percent ($n = 22$) slightly confident or not at all confident.

Subjectiveness of PTSD Criteria (9%, n = 17)

Related to the concern about malingering was that the criteria are based on self-report and hence are subjective.

Typical comments:

It is too subjective, does not have any objective parameters beyond observed startle response.
I am not satisfied, because the criteria are all subjectively self-reported, and difficult to verify, and therefore open to abuse.

Complexity of Forensic Cases Not Captured by PTSD Criteria (8%, n = 14)

Typical comments:

As with all DSM, it is categorical, whereas trauma symptoms are dimensional. This can be distorting in a medicolegal process.
In cases where severe childhood sexual/physical abuse and extreme neglect have perverted and destroyed normal developmental sequences, the criteria are totally inadequate to capture the relevant mental state issues and phenomena.
I have found that many people have many symptoms of re-experiencing the trauma. . .while not as much of the avoidance symptoms. . . . Sometimes it makes more work having to explain the diagnosis because it does not follow the script of the DSM.

PTSD and Criminal Legal Standards

Respondents were asked whether, in their opinion, a PTSD-based insanity defense could meet the legal threshold for insanity based on four standards: Insanity Defense Reform Act (IDRA), *M'Naughten*, Irresistible Impulse Test, or Product (Durham) Test. Of 176 respondents, only 16 ($n = 29$) thought that PTSD could not meet any of these standards. However, respondents were divided as to which standards could be met: 46 percent ($n = 81$) the IDRA standard, 48 percent ($n = 85$) the *M'Naughten* standard, 54 percent ($n = 95$) the Irresistible Impulse Test, and 59 percent ($n = 103$) the Product Test.

Seventy-three percent ($n = 129$) of respondents believed that PTSD can provide a valid basis for claims of diminished responsibility. Regarding sentencing, 90 percent ($n = 158$) of respondents agreed that PTSD can provide a valid basis for mitigation. Only 26 percent ($n = 45$) believed that it can support a finding of incompetence to stand trial.

Discussion

Our study suggests that criminal cases involving a legal argument based on PTSD are common in current forensic practice, with half of respondents to our survey reporting involvement in such a case, most of those within the past four years. Even if the survey attracted a disproportionate response from psychiatrists who have experience with PTSD in the criminal setting, the results indicate that a substantial number of forensic psychiatrists have extensive experience in this area.

Combat-exposed defendants are involved in a substantial portion of PTSD-related claims (35%, 38/109 of cases in this sample). Most combat-exposed defendants were from recent conflicts (Operations Iraqi Freedom and Enduring Freedom) and were young. Even for veterans of the Vietnam War, most of the criminal cases occurred in the past four years, demonstrating that veterans from remote conflicts may invoke PTSD decades later when facing criminal charges. Our study suggests that combat-exposed defendants are a distinct group. They were more likely to be male, consistent with the predominance of men in combat roles in the military, and white. Although approximately 80 percent of veterans are white,[31] whites make up a much smaller proportion (about half) of veterans in prison.[14] The predominance of whites in our sample of veterans (83% of combat exposed defendants) raises the question of whether they have greater accessibility to expert forensic psychiatric testimony than their minority peers.

Previous studies have pointed to underutilization of mental health services among veterans, but in our sample, combat-exposed defendants were more likely to have been in mental health treatment at the time of the offense. This may account for the fact that combat-exposed defendants were also more likely to

have made previous legal claims based on PTSD, given that they would be better able to present evidence supportive of the diagnosis. Combat-exposed defendants were less likely to be viewed as malingering, especially if they also sustained a physical injury or TBI and opposing forensic experts were more likely to agree on the presence of PTSD. These results suggest that defendants who have military records or physical scars in addition to psychological ones are more likely to be deemed reliable by forensic psychiatrists. The presence of physical injury may be seen as a more objective measure of trauma than self-reported PTSD symptoms, a view shared by those states that require physical impact or injury to accompany claims for psychological damages in tort cases.[33] Future studies should investigate the impact of physical injuries on PTSD assessments in larger samples of defendants and plaintiffs in civil cases.

Combat-exposed defendants pursued different legal strategies than their noncombat exposed peers. Although we found no significant differences between the groups with respect to diagnosis or charges, combat-exposed defendants were more likely to pursue the insanity defense. This finding raises the possibility that defendants and their attorneys felt more confident that the defendant's mental state would be accepted as exculpatory. If so, our data, which showed no differences based on combat exposure with respect to verdict or legal outcome, suggest that their confidence may be misplaced.

With regard to our sample as a whole, legal strategies and outcomes show that PTSD has a broad range of uses in the criminal context, and forensic psychiatric evidence concerning PTSD was introduced at every stage of legal proceedings. However, forensic evaluations of PTSD may be more likely to be requested in violent offenders [86% ($n = 92$) faced charges related to crimes of violence], since many nonviolent offenders are likely to receive probation or diversion, for example through drug courts or veterans treatment courts. Because respondents reported high rates of mitigation, pleading to a lesser charge, and NGRI verdicts, the results suggest that forensic psychiatric evidence of PTSD may influence legal outcomes significantly.

Psychiatrists showed differences in opinion depending on which side retained them. Prosecution-retained forensic psychiatrists were more likely to perceive malingering and less likely to diagnose PTSD. Because survey respondents were asked to report on the most recent case with which they had been involved, not in which they had testified, these findings cannot be explained by the attorneys in these cases having rejected unfavorable opinions and kept their authors off the witness stand. However, our data are consistent with both selection by attorneys of evaluators known to favor prosecution or defense perspectives and with recent data suggesting that experts' opinions may differ, depending on the retaining party.[34]

Assessment approaches focused mainly on interviews, typically conducted without the assistance of structured instruments, and on review of health and criminal records: military records were usually not reviewed, nor were witnesses to the trauma, including former military personnel, interviewed. This finding is particularly notable, given that many respondents were critical of the subjective and difficult-to-verify nature of DSM's PTSD criteria. Future research should investigate what factors, such as limitations in time, finances, availability of records or collateral sources, or legal constraints, prevent inclusion of these data sources in forensic assessments.

Whatever their evaluation practices, respondents often held negative views about the criteria for diagnosis of PTSD in the forensic setting. Diagnostic criteria were seen as too broad or too narrow, and most thought that PTSD was overdiagnosed. In addition, respondents felt that PTSD is easily malingered. A small but articulate group of respondents believe that the PTSD criteria do not capture the complexity of trauma-based presentations in forensic practice and complicate the challenges of presenting these data to the judicial system.

Perhaps surprisingly, given these concerns, the use of PTSD-based forensic evidence in the criminal setting enjoyed broad support among respondents, especially with respect to behaviorally based tests. More respondents believed that PTSD could meet the Irresistible Impulse Test and the Product Test criteria than the *M'Naughten* standard or IDRA criteria, suggesting that forensic psychiatrists find PTSD's impact on impulse control and behavior more credible than its impact on cognition. Consistent with this behavioral focus, three-quarters of respondents agreed that PTSD could be used to claim diminished responsibility. In contrast, only a quarter

of respondents believed PTSD could support a claim of incompetence to stand trial, a largely cognitively based standard.

Several factors limit the generalizability of our findings. Our low response rate may mean that our respondents were not representative of U.S. forensic psychiatrists. Overrepresentation of psychiatrists with a particular interest in PTSD in the criminal setting may have led to reporting of a larger-than-expected number of cases. As in all retrospective studies, recall bias may have led to disproportionate recollection of certain cases, such as ones involving violent crimes or combat-exposed veterans. Criteria for PTSD have been updated since this study with the publication of Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5)[35] although the changes were relatively modest, respondents' views of DSM-IV-TR PTSD criteria may not be applicable to the updated criteria set. Finally, our findings may not be generalizable to forensic evaluations outside the United States, where different standards may apply and different approaches to assessment may be used.

Taken as a whole, these data demonstrate that PTSD-related claims play an important role in a substantial number of criminal cases. At the same time, they raise questions about the adequacy of standard approaches to forensic assessment of PTSD and suggest that evaluations would benefit from greater use of structured assessments and collateral information. With the anticipated increase in the number of veterans in the criminal justice system in coming years, optimizing the role of forensic psychiatrists in PTSD-related cases assumes greater urgency.

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