

Screening for and Treating PTSD and Substance Use Disorders Among Incarcerated Men

“Trauma is not a life sentence.” ~ Peter A. Levine

For many incarcerated men, trauma has been an integral and persistent part of their lives. They have grown up in it, been shaped by it, and reacted to it. Indeed, trauma has become their culture; they have been surrounded by it for so long that it is considered normal. Trauma to incarcerated men is like water to fish; they do not know they are in it. Violence, abandonment, loss, and other forms of trauma, whether experienced directly or indirectly, have been, for many, everyday occurrences. Perspective, however, only comes from stepping outside what is internalized as “normal.” Only then is it possible to see how trauma has become, for many, a life sentence of anger, depression, and aloneness, often contributing to behaviors, such as criminality, substance abuse, and mortality, that perpetuate the culture of trauma. The diagnosis and treatment of trauma-related problems is the step outside that begins the process of recovery.

Research, to date, has focused primarily on the epidemiology of trauma among incarcerated men. The evidence is clear: trauma is a common. According to a survey of approximately 7000 incarcerated men in New Jersey prisons, more than half (56%) of all incarcerated men reported experiencing childhood physical abuse (more than twice the national rate). Nearly one in ten reported an event of childhood sexual abuse. Trauma exposure continues inside prison. Nearly one-quarter of incarcerated men in New Jersey prisons reported at least one experience of physical trauma over a six month period.²

More is known about the nature and frequency of trauma among incarcerated men than how it has affected their wellness. Trauma can cause psychological shock that endures over time and manifests as an array of symptoms (e.g., hypervigilance, flashbacks, emotional numbing). For some, trauma exposure will develop into posttraumatic stress disorder (PTSD), a treatable condition. PTSD is defined as a set of symptoms triggered by “exposure to actual or threatened death, serious injury or sexual violation” that results from directly experiencing a traumatic event; witnessing a traumatic event; learning that a traumatic event occurred to a close family member or close friend; or experiencing first-hand repeated or extreme exposure to aversive details of the traumatic event.³ In community samples, roughly six percent of men exposed to trauma develop PTSD; the conditional probability increases to 21 percent for those experiencing violent trauma (e.g., assaultive violence).⁴ It is expected that rates of PTSD will be higher among incarcerated men because they have been exposed to childhood abuse and neglect, violent trauma, and multiple trauma exposures.⁵⁻⁶

Research shows that trauma exposure is strongly associated with physical illnesses,⁷⁻⁹ mental illnesses,¹⁰ and substance abuse.¹¹⁻¹² Solid connections also exist between trauma and anger, aggression towards others, and self-destructive and suicidal behaviors.¹³⁻¹⁴ Abuse in childhood also is strongly correlated with adult victimization and criminality.^{6,15-19} While the health, behavioral health, and criminal consequences of trauma-related histories are well-established, very little trauma-focused diagnosis and treatment exist inside adult male prisons.

What is trauma?

Individual trauma results from an event, series of events, or set of circumstances that is experienced by an individual as physically or emotionally harmful or threatening and that has lasting adverse effects on the individual’s functioning and physical, social, emotional, or spiritual well-being.¹

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About the Policy Brief

The policy brief series highlights a policy issue under study at the Center. Policy topics include reentry, diversion, sentencing, recidivism, employment, treatment, and recovery. For more information, see the News page on the Center’s website.

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Not addressing trauma and its consequences for recovery and recidivism among incarcerated men has huge economic consequences as men account for 94 percent of the prison population and roughly 700,000 leave prison annually.²⁰ Nearly two-thirds of men released from prison will be rearrested within three years, and at least half will be under the influence of alcohol or drugs at time of arrest.²¹ Ignoring their trauma and its relationship to substance use and other behavioral problems may be part of their problem, and diagnosing and treating part of the solution.

The Center, in cooperation with the Pennsylvania Department of Corrections (PADOC) and with funding from the National Institute of Mental Health (grant number R01-MH095206), conducted a study that screened incarcerated men for PTSD and substance use disorders (SUD) and provided treatment to those who screened positive for both disorders. The study was conducted at an adult high security prison in Pennsylvania that houses approximately 4000 men. The study screened a random sample of incarcerated men for PTSD and SUD and assigned those who screened positive for both disorders to evidenced-based, manualized first stage trauma interventions. This report describes the treatment study and summarizes the key findings.

"I never really got the chance to understand why I did what I did and why I cope the way I cope." ~ Study Participant

The Trauma Screening and Intervention Study

Center staff screened for PTSD and lifetime SUD among male residents housed at a high security prison operated by the PADOC from February to June 2012. Residents eligible for the survey were 18 years or older and had at least 10 months remaining on their mandatory minimum sentence to be completed at the host facility (to ensure sufficient time to complete the study prior to release). Excluded were residents with active psychosis or organic brain impairment (limiting their ability to give informed consent) or currently on or been on suicide watch in the past three months. Of the estimated 4000 residents, approximately 2000 were eligible for the study. Half of these men were randomly invited to be screened and 592 consented and participated in the screening.

Screenings were administered by clinician and computer. In-person interviews were conducted by clinically trained research staff, while computer-administered interviewing was completed on laptop computers with external mouse devices. Residents were screened twice; first they were randomly assigned to in-person or computer administered screening, with follow-up random as-

signment to either in-person or computer administration. Second screenings were separated by four to seven days. The screening instruments were the Trauma History Questionnaire,²² the PTSD Checklist (PCL),²³ and the Alcohol, Smoking and Substance Involvement Screening Test (ASSIST).²⁴

Residents who screened positive for PTSD symptoms (PCL>34) and lifetime SUD were invited to participate in treatment. Of those invited to participate (n=327), 71 percent (n=231) agreed and were randomly assigned to either Seeking Safety or Male-Trauma Recovery and Empowerment Model(M-TREM), first stage therapies employing a manualized and integrated approach drawing heavily on cognitive behavioral treatment (CBT) and skill-building orientations to foster empowerment and safety. While both focus on trauma-related psychopathology, the underlying philosophy and content are different. Seeking Safety integrates CBT and psychoeducational principles.²⁵ The Seeking Safety manual covers topics that address cognitive, behavioral, and interpersonal needs of persons with PTSD and SUD. M-TREM integrates empowerment, trauma education, and skill building for men.²⁶ The goal of M-TREM is to build recovery skills that are grounded in healing and connecting trauma with self-harming behaviors such as substance use, interpersonal problems, and mental health symptoms. It mainly draws from psychodynamic and experiential techniques.

Both Seeking Safety and M-TREM were organized in (closed) group sessions (~8-10 subjects per group) and met twice a week (90 minutes/session) for 12 weeks. Group leaders received structured training in either Seeking Safety or M-TREM and were blind to the other intervention. They received weekly supervision by an expert in their intervention. Leaders had masters-level training in psychology or social work.

Participants in the treatments were interviewed prior to group assignment, at the completion of the group, and at three and six months post completion. Treatment effects were assessed by changes in PTSD symptoms and other psychological symptoms. The two primary measures were the Clinician-Administered PTSD Scale for DSM-IV (CAPS) and PCL for PTSD symptoms,²⁷⁻²⁸ and the Global Severity Index (GSI) of the Brief Symptom Inventory (BSI) for mental health symptoms.²⁹ The CAPS, a 30-item structured interview, was used to make a current (past month) or lifetime diagnosis of full or sub-threshold PTSD. According to DSM-IV criteria, full PTSD is defined as having a qualifying traumatic event, one re-experiencing symptom, three avoidance symptoms, and two arousal symptoms lasting at least a month with the presence of co-occurring significant symptom-related distress or functional impairment. Sub-threshold PTSD requires a

qualifying traumatic event, one re-experiencing symptom and either three avoidance or two arousal symptoms lasting at least a month with the presence of co-occurring significant symptom-related distress or functional impairment.³⁰ Dimensions of self that may be affected by the interventions were measured

by the Rosenberg Self-Esteem Scale (SES),³¹ Proactive Coping Inventory,³² and Generalized Perceived Self-Efficacy (GPEF)³³ to measure changes in self-esteem, coping proactivity, and self-efficacy, respectively.

“... I keep making these stupid mistakes and keep getting in these jams and I know how not to, but I have this unconscious motivation to continue to beat my head against that wall. No one ever mentioned the origins of that. So it was insanity ... a reaction to adverse conditions.” ~ Study Participant

Table 1: Demographic characteristics of men participating in the screening and treatment phases of the study.

Nearly 600 men participated in the screening phase of the study. Most were non-White, had completed high school or GED, were convicted of a violent offense, and spent, on average, 15 years in prison since turning 18 years old. A sizable minority were Veterans who had served on active duty either in the U.S. Armed Forces or as a member of the Reserves or National Guard.

The intent-to-treat sample includes participants who screened positive for PTSD, SUD, and consented to participate in the treatment phase of the study. The completers are those in the intent-to-treat sample who attended at least 50 percent of the treatment sessions.

Characteristic	Screened Sample (n=592)	Intent-to-Treat Sample (n=231)	Completer Sample (n=181)
Age (mean, SD)	42.7 ¹ (12.3)	42.5 (12.5)	43.6 (12.6)
Race: %			
White	29.2 ¹	32.0	30.9
African-American	49.8	50.2	51.9
Hispanic	13.6	10.0	10.5
Other	7.5	7.8	6.6
Education			
High school or GED (%)	46.6 ¹	49.8	53.0
Any college (%)	31.9	30.7	29.8
Veteran status			
Veteran, active duty (%)	15.3 ¹	22.4 ¹	23.3 ¹
Time incarcerated since 18, (mean, SD)	14.9 ¹ (11.7)	15.4 ¹ (12.0)	16.1 ¹ (12.6)
Violent crime (%)	54.7 ²	56.6 ¹	58.9 ¹

¹Sample percentages or means based on one percent or less missing data.

²Sample mean based on two percent missing data.

Table 2: Distribution of trauma exposure among incarcerated men

Incarcerated men reported a wide assortment of traumatic events over the course of their lifetimes, including crime-related, general disaster, and physical and sexual abuse. Of the screened sample, nearly 85 percent reported being a victim of a crime-related event, such as a mugging, robbery, or home invasion. Virtually all experienced at least one general disaster in which their life or a life of a loved one was threatened or lost. Death, fear of death, and serious injury are particularly common events in the lives of incarcerated men.

In addition, over three-quarters of the men screened reported events of physical or sexual abuse. Seven in ten men reported an event of physical trauma during their childhoods. Sexual abuse in childhood was reported by over one-fifth of the screened sample.

Compared to the full sample of men screened, the men in the treatment samples were more likely to report experiencing crime-related events, some general disaster events, particularly combat-related, and physical and/or sexual abuse.

“I carry some scars from my childhood ... I never called it trauma before. It’s just things [that] happen. That’s how it is but I never knew that it was actually a traumatic event, and actually left a psychological scar.” ~ Study Participant

“... my life was traumatic. ... I never really thought [of it] as being traumatic, you know? I thought it was the normal thing.” ~ Study Participant

“... in the past and when I was growing up as a child ... my issues came from me not being able to talk about my issues and talk about anything that was going wrong with me ... I was always exploding and wanting to fight, or always angry ... so that I would go out and war and I would fight amongst friends or just express myself in a way that I shouldn’t have ...” ~ Study Participant

Trauma Characteristics	Screened Sample (n=592) ¹	Intent-to-Treat Sample (n=231)	Completer Sample (n=181)
Crime-related events (% any)	84.6	91.3	90.1
Stick-up or mugging	68.5	73.2	72.4
Robbery	78.4	84.4	84.5
Break into home, not present	43.8	52.8	51.4
Break into home, present	15.5	21.2	20.4
General disaster events (% any)	98.5	99.1	98.9
Serious accident	62.6	68.0	66.9
Seriously injured	62.7	69.3	68.5
Fear of being killed or injured	82.8	89.6	89.0
Someone injured or killed	87.6	91.8	92.8
Dead bodies	68.3	72.3	72.9
Close friend/family member murdered or killed by driver under the influence	36.4	38.5	36.5
Death of spouse/partner or child	39.1	43.5 ²	43.3 ²
Serious illness	26.9	32.9	34.3
Serious injury, illness, or death of someone close	89.8	94.8	94.5
Combat	8.7	11.7 ²	10.5
Physical or sexual trauma (% any)	79.3	87.0	86.7
Have sex against your will	15.3	18.9 ²	17.4 ²
Unwanted sexual contact	15.8	24.9 ²	26.3 ²
Attacked with weapon	64.2	71.4	70.7
Attacked without weapon	41.0	49.6 ²	46.7 ²
Childhood trauma/violence (%)			
Physical	71.3	81.1 ²	80.0 ²
Sexual	21.8	28.3 ²	28.2 ²

¹Sample means based on one percent or less missing data except for childhood trauma/violence mean where nine percent of data were missing.

²Sample means based on less than two percent missing data except for childhood trauma/violence means where eight percent of data were missing.



“I’m the type of person who just always pushed things aside and never dealt with them, and I’ve had some serious, serious trauma in my life. I wasn’t in the military or anything but there’s some stuff that really screwed me up. I just blocked everything that is in any way associated with it. I just said, ‘Forget it.’

Consciously, I’m fine. Subconsciously, it keeps nagging at me, and I never connected the two sides. Part of what this program did was help me to realize what PTSD is. What this trauma thing is all about...

I opened up ... some things were shared in the group that really hit with me. I’d say, ‘Well, I didn’t have that exact experience but I had a very similar one.’ It made me start kicking it back in ...

... this is my first experience in dealing with myself and actually sitting down and saying, ‘Okay, well, what caused me to think the way I think? What causes me to have the problems I have? What causes me to wake up in a cold sweat?’...”

~ Study Participant

Table 3: Distribution of PTSD symptoms pre-treatment

Men participating in the treatment phase of the study screened positive for PTSD, with a PCL score of 35 or higher, and lifetime substance abuse disorder, according to the ASSIST. The mean score for the PCL was 44.1 for the intent-to-treat sample and 44.0 for the completer sample. Of those assigned to treatment, approximately 83 percent met criteria for lifetime PTSD (full or sub-threshold) and 61 percent for current PTSD based on the CAPS. Separate analyses were conducted on a sub-sample of completers who met the criteria for current PTSD according to the CAPS at baseline (completer sample with current PTSD). The mean PCL score for the sub-sample of completers was approximately five points higher (49.4) than the mean score for the intent-to-treat or full completer samples.

Interview Phase	Mean PCL Score	Percent CAPS Current PTSD		Percent CAPS Lifetime PTSD	
		Full	Sub	Full	Sub
Intent-to-Treat Sample, n=231					
Baseline	44.1 N=229	44.3 N=228	16.2 N=228	70.3 N=229	13.1 N=229
Completer Sample, screened positive to PTSD, PCL > 34, n=181					
Baseline	44.0 N=180	46.4 N=179	13.4 N=179	70.6 N=180	12.8 N=180
Completer Sample, current diagnosis of PTSD, n=107					
Baseline	49.4 N=106	77.6	22.4	90.7	9.3

Table 4: Distribution of outcomes scores pre- and post-treatment

For the full completer sample, significant improvements were found across all outcomes: general mental health (GSI), PTSD (PCL and CAPS), self-esteem, proactive coping, and self-efficacy, and these changes endured over the six-month follow-up period. Most noteworthy is the significant decline in PCL and CAPS scores. From baseline to treatment completion (T1), the PCL score declined by 13 percent and the CAPS score by 31 percent. Over the same time frame, and reflecting the decline in the PTSD symptoms, the proportion of subjects with current full or sub-threshold PTSD declined by 22 percentage points (59.8% to 38.2%).

A separate analysis was conducted on those participants who, according to the CAPS diagnostic instrument, had current full or sub-threshold PTSD at baseline. Compared to baseline, the PCL scores at the conclusion of the treatment phase (T1) had declined by 15 percent and the CAPS score by 33 percent for this sample of completers. Subjects with current full or sub-threshold PTSD had declined by 45 percentage points (100% to 55.3%) immediately post-treatment. Significant improvements were also found in self-esteem, proactive coping, and self-efficacy. While participants were assigned to two manualized interventions (Seeking Safety and M-TREM), results presented here do not distinguish between interventions. Comparisons between interventions will be published separately.

Measure	Full Completer Sample (Current PTSD Symptoms, PCL>34)				Completer Sample (Current PTSD Diagnosis, CAPS)			
	Baseline N=180	T1 N=173	T3 ¹ N=157	T6 ¹ N=154	Baseline N=107	T1 N=103	T3 ¹ N=90	T6 ¹ N=86
Brief Symptom Inventory	1.03	0.80**	0.80**	0.78**	1.22 N=106	0.91**	0.96**	0.98**
PTSD Checklist	44.0	38.3**	37.5**	36.6**	49.4 N=106	42.1**	42.1**	41.4**
CAPS, score	44.3 N=176	30.4** N=172	26.5** N=154	24.7** N=146	62.1	41.3**	36.9** N=87	35.4** N=79
CAPS, PTSD, %	46.4 N=179	27.2**	16.1** N=155	16.7** N=150	77.6	42.7**	27.3** N=88	28.1** N=82
CAPS, Sub-threshold PTSD, %	13.4 N=179	11.0	21.3 N=155	12.7 N=150	22.4	12.6	27.3 N=88	18.3 N=82
Self-Esteem	18.5	20.1**	20.7**	20.6**	17.2 N=106	19.3**	19.6**	19.3**
Proactive Coping Inventory	40.6	42.8**	43.7**	43.7**	39.3 N=106	41.9**	42.9**	42.7**
Perceived Self-Efficacy	29.7	31.2**	31.3**	31.5**	29.1 N=106	30.8**	30.9**	30.7*

*p<0.05, **p<0.01 using paired t-test or McNemar test comparing T1, T3, and T6 measures to baseline measures
¹T3 and T6 interviews have not been completed on Wave 4 participants.

Satisfaction with the Trauma Intervention

At the end of the treatment, participants completed a satisfaction survey and participated in a 90-minute focus group. The mean score (based on a 4-point Likert scale with 1=poor and 4=excellent) for the Client Satisfaction Questionnaire was 3.09 for the extent to which the “[treatment program] met your needs;” 3.48 for “[treatment program] helped you deal more effectively with your problem;” 3.56 for “satisfaction with [treatment program];” and 3.79 for “would you recommend the [treatment program] to a friend.”

In the focus groups, participants reported overall satisfaction with the size of the group (“person don’t really want to open

up when there’s a lot of people”), the facilitators (“she really cared” “he made us feel comfortable”), the frequency of the sessions (“gave us time to think”), treatment materials (“easy to understand”), and the cohesion within the groups (“liked the camaraderie we built”). The men frequently commented on the safety and trust that they felt within the group. One man said, “Man, we are forever linked with each other, man. Out of all the groups I’ve ever been to, I never had that bond ... I never formed them bonds with individuals like I’ve formed in this group ... We formed a relationship in here of trust, honesty and support and safety, man, and that’s something that you just can’t put a value on that. You can’t put a value on that.”

The safety and trust they placed in each other facilitated the process of sharing, grieving, and moving on. Many of the men shared stories that had haunted them for decades, and the members supported each other as they felt the consequences of their traumas. For example, a man reported *“I really really opened up. I cried then, because I released some information that I held in for [decades]. And never, never expect me to give that type of information up in a group session. But I felt comfortable around the facilitator and the gentlemen that I was around that I like, let it go. And when I did, it released a lot of pressure and tension that I had held in for many years.”* This was echoed by another man who said *“this is probably the first time in my whole entire life where I opened up in a group.”*

The dissatisfaction most frequently noted by the men concerned the ending of the group. They felt that they: (a) had more work to do; (b) didn't want to the group to end; and (c) wanted another program. One man commented that *“I was happy when [other groups] were over ... but this group here was quite the opposite ... I am where I need to be and where I want to be ... the group wasn't long enough ... I can't wait to be involved in the next group, to get more information that's going to help me. I've never felt more excited about attending another group. ... I just feel so good, man, and I see it in the guys that's in my group.”*

Practice and Policy Implications

Our findings suggest that trauma-related symptoms are prevalent among incarcerated men and that these symptoms are responsive to manualized integrated trauma and addiction treatment. In addition, our study demonstrates that it is possible to recruit participants to trauma treatment and retain their participation without coercion, as well as engage them in meaningful ways in a group milieu. Group cohesion was established within all groups (n=28) and it facilitated the process of trauma recovery. Study participants were very supportive of expanding trauma services to the general population of incarcerated men but they were not confident that the treatment could be delivered by correctional staff. There were concerns about competence, confidentiality, and compassion. In response, we developed training modules on trauma-informed care in a correctional setting, the profile of trauma among incarcerated persons (focusing on interactions among trauma, mental illness, addiction, and criminality), manualized trauma-addiction interventions, and building group cohesion. This three-day training involves graduates of our study and is being provided to the PADOC clinical and supervisory staff. Over the next year, we will be analyzing the data to more clearly identify the most effective ways to screen for trauma-related symptoms, to recruit participation in trauma treatment, and to implement manualized treatment provided by correctional staff.

One Man's Story...

“I found out I needed help with the problems that I was dealing with inside myself as far as the visions and the nightmares and the panic attacks I was having, and the times when I got into disputes or disagreements with people, I'd get them flashbacks of the crime that I committed and I'd be on the urge of reacting, to act out again, ... but the understanding and the tools that I got from the first group helped me in that area of dealing with the issues that I have.

I don't get as angry as I used to ... because [of] the tools the [group] gave me and information ... about PTSD and my substance abuse... Prior to that, I was on the edge ready [for] something dangerous to have happened from the interactions I was having with individuals, but now things seem to just – it's easier for me to deal with those issues now because ... I opened that door to all that anger and regret and disappointment.

Once that door was opened, it just seemed like everything was released like a valve was just opened ... I was experiencing these things for [decades] since I've been down and I never had the courage ... to go and reach out and tell about what I was going through because I actually thought I was crazy. I thought I was going crazy and I said, 'I can't talk to them and they gonna think I'm crazy and then they gonna put me in a room with nothing but four walls' ... I was afraid of that, so I never talked about what was bothering me. And the group gave me that information about my substance abuse and PTSD that made me feel comfortable to know that I wasn't the only one suffering from these type of symptoms and that there's help out there and it helped me reach out to my psychologist here and talk to them about what I was going through, so it helped me – it helped me in so many ways, man, you know, to the point where when I go back to work, I talk to the guys on my job about that. ... They were the first ones I showed my certificate to.... Nothing can be compared to what I got out of this group.”

Another Man's Story...

“In my early childhood, from three to ten years old, I was abused by my mother and her friends and over the course of my life, there's been a very -- not just distrust, but distaste, disdain for women in general. And to see [researcher's] character and ... then meeting [the group facilitator] – and this has been a problem that I have worked on over my entire life – that really opened my eyes that not all women are like those who abused me. Some people care ... one of the better things I got out of this program is that there are people who care ... that all women just aren't out to hurt you.”

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