Emotional Response, Recovery, & Consequences of Traumatic Injury

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Significance

Urban violence as a public health concern

1994

Table 1. Comparisons of three marginal cities, rest of state, and United States: selective causes of violent death[a] (death rate per 100,000)

Cause of death	Population	Three cities 1985–1990	Rest of New Jersey 1985–1990	United States[b] 1987	2000
Homicide	All people	32.1	3.6	8.5	7.2
	Children <4	11.7	2.2	3.9	3.1
	Black men, 15–34	119.8	34.7	90.5	72.4
	Black women, 15–34	26.8	12.8	20.0	16.0
Poisoning	All people	13.3	3.6	3.8	3.0
Falls	All people	13.5	3.5	2.7	2.3
Fires	All people	6.5	1.4	1.5	1.2
	Children <4	14.6	2.0	4.4	3.3
	All 65+	10.8	3.8	4.4	3.3
	Black men	8.8	3.9	5.7	4.3
	Black women	6.1	2.8	3.4	2.6
Suicide	All people	8.5	9.0	11.7	10.5
	Youth 15–19	6.3	7.3	10.3	8.2
	Males 20–34	24.0	19.1	25.2	21.4
	White males 65+	30.1	28.3	46.1	39.2

[a]Three cities are Camden, Newark, and Trenton, NJ.
[b]Source: *Healthy People 2000*, 1990.

1. Why is there a concentration of crime and violence in these environments?

1. Why are black people, specifically, black men more victimized by this violence?

Table 1: Greenberg M & Schneider D. (1994). Violence in American cities: Young black males is the answer, but what was the question? Social Science & Medicine, 39, 179-187

Violent crime continues to be concentrated in urban areas

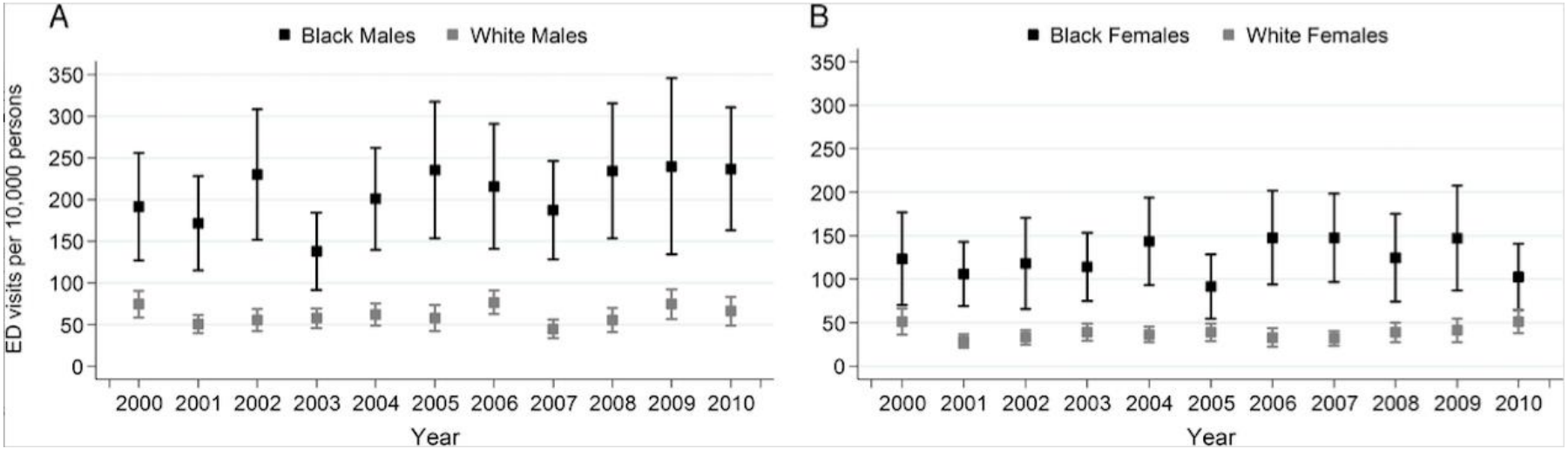
Rate of total victimization and percent of victimizations reported to police, by type of crime and household location, 2016

	Rate of total victimization			Percent of victimizations reported to police		
Household location	Violent crime[a]	Serious violent crime[b]	Property crime[c]	Violent crime[a]	Serious violent crime[b]	Property crime[c]
Total	21.1	7.0	119.4	42.1%	51.3%	35.7%
Region						
Northeast*	16.7	4.6	76.6	44.8%	57.6%	32.0%
Midwest	27.0 †	9.7 †	114.1 †	34.6 †	45.2	33.7
South	16.3	6.2	115.5 †	48.1	57.7	40.3 †
West	26.6 †	7.6 †	165.3 †	42.1	47.1	33.0
Location of residence						
Urban*	29.9	10.7	150.5	41.9%	52.6%	34.1%
Suburban	15.4 †	5.1 †	97.0 †	42.6	50.9	37.9 †
Rural	21.7 †	5.6 †	125.0 †	41.4	46.8	34.4

Table 2: Rachel E. Morgan and Grace Kena (2016) Criminal Victimization, U.S. Department of Justice

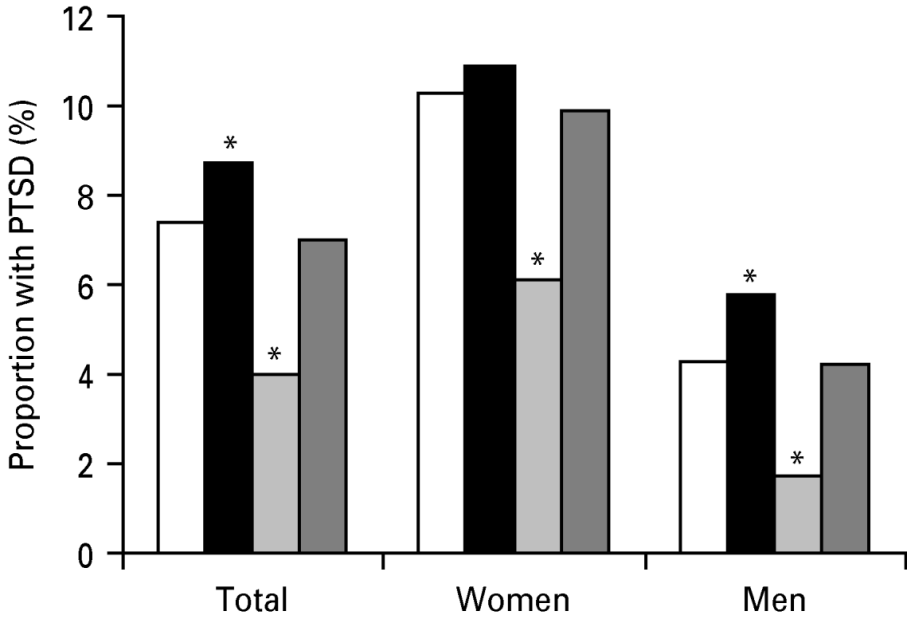
Black men are more susceptible to violent injury

ED visits for nonfatal violent-related injuries among adults stratified by race for males (*A*) and females (*B*) from 2000 to 2010, United States (95% CIs)



Rich, J. A., & Grey, C. M. (2005). Pathways to recurrent trauma among young black men: Traumatic stress, substance use, and the "code of the street". American Journal of Public Health, 95(5), 816-24.

Black men respond more severely to traumatic injury

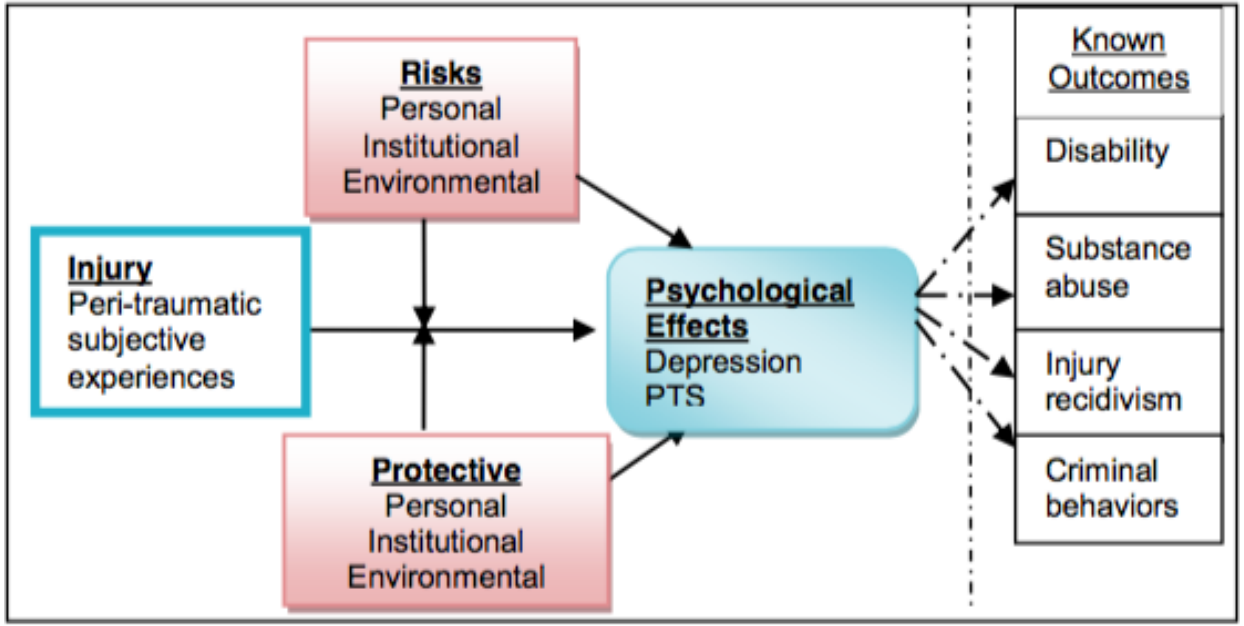


Black individuals (represented by black bar) are more likely to experience PTSD.

Yet only **35%** of black individuals with PTSD will seek care.

Roberts, A., Gilman, S., Breslau, J., Breslau, N., & Koenen, K. (2011). Race/ethnic differences in exposure to traumatic events, development of post-traumatic stress disorder, and treatment-seeking for post-traumatic stress disorder in the United States. Psychological Medicine, 41(1), 71-83.

Cumulative Exposure to Trauma



Emotional Response, Recovery from Trauma (ERRI) Study Overview

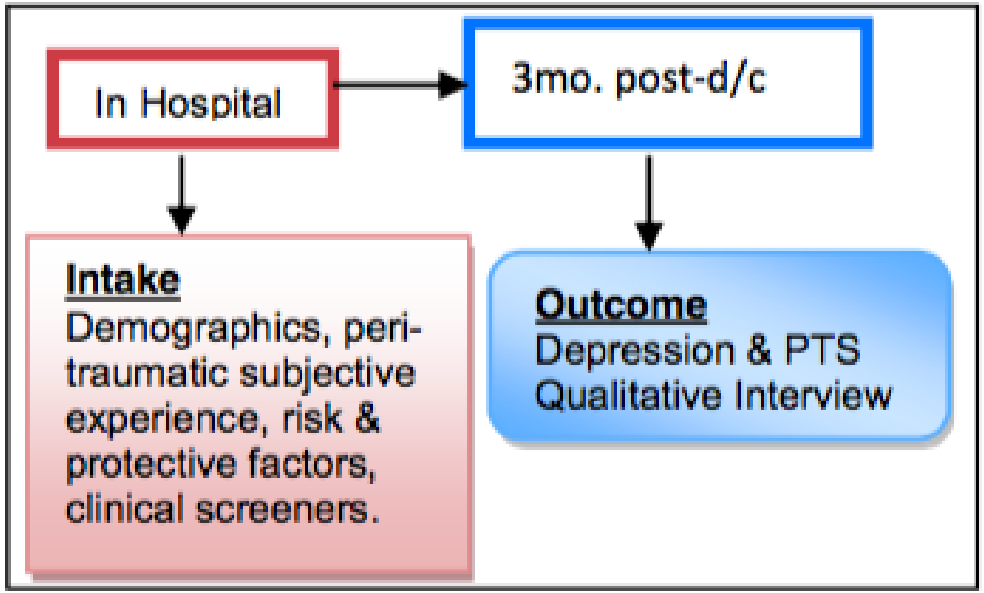
Aims

1) Evaluate a model that describes the relationship between peri-traumatic subjective experience, risk factors, and protective factors to predict depression and PTS in black men after traumatic injury.

2) Evaluate the predictive ability of two established, short clinical screeners to predict the future development of post-injury depression and PTSD

3) Gain a richer understanding of black men's experiences with traumatic injury

Methods



Who?

Black men admitted to Level 1 Trauma Center

→ 617 patients were enrolled

→ 502 Follow-ups

→ 95 Qualitative Interviews

**Exclusionary Criteria: Previously diagnosed mental illness, receiving psychological care

Where?

Penn Presbyterian Medical Center → Level 1 Trauma Center

Patient homes for follow-ups

Semi-structured interviews

1. Tell me what it was like being in the hospital for your injury?
2. Tell me how it has been like since you left the hospital?
3. Who has helped you since you left the hospital?
4. What has been the hardest part since being injured?
5. What has helped you recover from your injury?
6. Have you ever been through anything like this before?

Subanalysis on Coping

Research question: How are black men coping with their injuries after they leave the hospital?

Literature research

Content-directed coding:

- Action-based coping mechanisms
- Thought-based coping mechanisms
- Stressors

Coping: Conscious effort to reduce stress

Coping strategies: specific efforts, both behavioral and psychological, that people employ to master, tolerate, reduce, or minimize stressful events

Sample Demographics (n=95) at Baseline

Age	35.70(14.92)
Education	
Less than high school	21%
High school graduate/GED	46.3%
More than high school	32.7%

Income	
<20k	47.7%
20k-40k	14.7%
40-60k	7.4%
60k +	7.5%
Don’t Know/Not Sure	30.1%(186)

Marital Status	
Single	64%
Married	12.6%
Living w/ partner	17.9%
Divorced/Widowed	5.3%

Sample Demographics (n=95) at Baseline

Intent		
	Frequency	%
Accidental	35	36.8
Intentional	60	63.2

Employment	
Full-time	30.5%
Part-time	20%
Unemployed	42.1%
Retired	4.2%
Student	3.2%

PTSD/Depression Outcomes at 3-month follow-up

Depression Scale	
Below Threshold (Non-symptomatic)	45.7%
Above Threshold (Symptomatic)	54.3%
PTSD Scale	
Below Threshold (Non-symptomatic)	54.7%
Above Threshold (Symptomatic)	45.3%

Are you back to work that you were doing before your injury?		
	Frequency	%
Yes, with no changes	10	10.5
Yes, but with limitations	5	5.3
Part-time only	8	8.4
No	72	75.8

Primary stressors

- Challenges with usual activities
- Loss of mobility
- Physical pain and injury recovery

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- Loss of mobility
- **Physical pain and injury recovery**

Um, well I've been in pain a lot,
'cause my insurance –
I'm still, it's still pending.
So I don't have like medical.

I don't have the meds that I need for the pain.
Um, other than like Advil, something like that.
But, some days it works,
Some days—majority of the days it don't work.

So, I gotta basically deal with the pain.
I'm in the house basically every day.

Secondary stressors

- Access to transportation, travel
- Economic
- Insurance and healthcare access
- Lack of social support
- Legal system
- Loss of loved one
- Psychological challenges (uncertainty about the future)
- Environment (Threats of violence)
- Interference with activities
- Previous comparable experience

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I've been having problems with like the public welfare.
To this day I haven't received stamps.
Getting back and forth.
I really can't go anywhere.
So if I have to go anywhere,
I have to get a ride.
So, mobility.

And I guess, being a little—
A little anxiety.

'Cause I have trust issues.
I don't like being out, now.
And around people, too much.
Strange people anyway.

Action-based coping strategies

- Avoiding
- Back to work, working
- Distracting, staying busy
- Efforts to increase safety
- Self-soothing and self-care strategies
- Substance use
- Self reliance

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I bury myself in video games to **try to not think about it too much.**

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Listen,
when I smoke my marijuana
It helps relax me.
It makes me eat.

you know, um make me--
I'm very active
I don't know—
Some people it makes them down
It makes me very active.

I eat.
I move around more.
you know.
And…

Thought-based coping strategies

- Acceptance
- Change in perception, traumatic demarcation
- Goal setting and future planning
- Gratitude
- Identifying progress

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- Acceptance
- Change in perception, traumatic demarcation
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- **Gratitude**
- Identifying progress

I got shot in my spine so
You know
They,
I'm supposed to,
I'm really supposed to be paralyzed.
Like truly God blessed me.

Thought-based coping strategies

- Acceptance
- **Change in perception, traumatic demarcation**
- Goal setting and future planning
- Gratitude
- Identifying progress

And since then, everything has been just so different.
Just been change.
Everything has changed for me.
My entire life.

From the way I walk.
You know, sleep.
Use the bathroom.

It's crazy.
It's crazy.

It's, like, the way I think,
I view the world,
The way I think.
My thought process towards people.

Looking forward

We aim to explore the coping mechanisms used by

- those injured intentionally vs accidently
- Those above and below the threshold for PTSD
- Those above and below the threshold for depression
- Those dually diagnosed and undiagnosed

...and eventually compile a manuscript to submit for publishing!

Consequences of Traumatic Injury (COTI) Study Overview

Project Overview

Longitudinal study that:

- Aims to find predictive candidates of chronic pain
- Diverse patient population(⅓ black, ⅓ latinx, ⅓ white)
- Tracks potential candidates at baseline, 3, and 9 months

Target N = 900

Predictive candidates evaluated:

- Physical functioning
- Bodily pain
- Role limitations due to physical health problems
- Role limitations due to personal/emotional problems
- Emotional well-being
- Social functioning
- Energy fatigue
- General health perceptions

My Role

→ Conducted baseline interviews @ Presby

→ Data entry into RedCap

→ Conducted follow-ups

Lessons Learned

Bedside manner is imperative to serving as a clinical researcher

Theory based coding is crucial to accurate coding!

Value of qualitative data

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Questions?