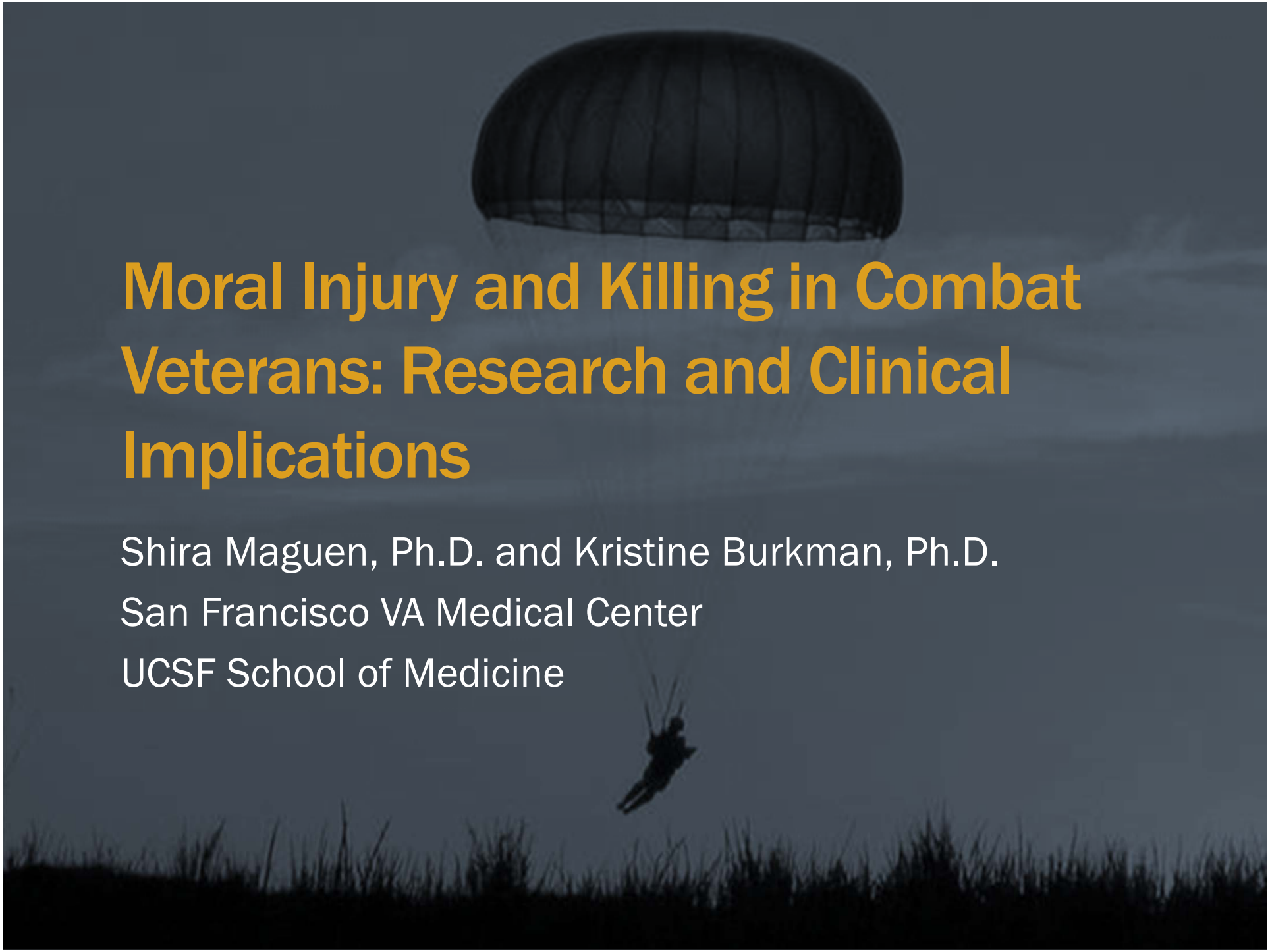

Moral Injury and Killing in Combat Veterans: Research and Clinical Implications

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Overview

- Background for studying moral injury
- Focus groups
- Moral injury: definition and conceptual framework
- Killing treatment module
- Implications
- Discussion

The Dark Side of the Self

"Seeing the dark side of the self"

"You kind of feel like a monster… What I am capable of doing is what scares me."

"It kinda brings into mind the question of who you are as a person and what you're capable of brings a lot of insecurity"

"Calloused reaction to death"

Secrecy & Stigma: Withdrawal

"I always thought that if I talked about some of those things, then people on the street would think that I was completely crazy. And that was reinforced because the media, the crazy Vietnam vets… they're "baby killers"… It was better not to tell anybody."

"You can't speak it out because you don't know who you're gonna talk to – what's gonna happen if you let your emotions or feelings out."

"I know they wanted to ask me that question, especially my father – but, you know, from the look of his face, he wants to know. At the same time I read in his face that he's kinda scared of what I would tell him."

"Putting it on the back burner."

Secrecy & Stigma: Consequences

"Not a day goes by where I don't think about [the killing incident]."

"I have this door open to my mind that is haunted."

"I drank to try and rid myself of the violent part I didn't like… not dealing with the hard stuff."

"I just had to push it back, and I figured I could just deal with it some other time. I have a bit but there is a lot of stuff I haven't, but drinking definitely numbed it or got my mind off of it."

"My thoughts coming home were: I would never be loved again. I would never be able to love again and that's where I am today 40 years later. That's why I'm here."

"I think because of what I've been through in Vietnam – I just kill, kill them all, whoever they are, just kill it, just shoot it. It's a free fire zone, it's what you're supposed to do. It's what you're trained to do. And I couldn't get close; I couldn't get close to anybody."

Morality

"Your morality gets tossed out the window… Same thing with religion, because I think once you start thinking about it: *Boy, I can't do this because this is against everything I've been taught or believed in since I was a young person*… When you start thinking about the moral issue, you'll be dead. You don't have time to think about those things. You just do it."

"But then you have to come back and you have to think about that later on and what you're responsible for, and that's very hard. That comes back to haunt me all the time."

"I think you feel ashamed of what you did. You know you're trained to do that and it just stays with you. I guess I feel very sad sometimes. I feel proud to be a soldier who tried to do something that I thought was right for the country. But it's hard to be a soldier. It tears away from your moral fiber. It changes your life."

Moral Injury Definition

- Perpetrating, failing to prevent, bearing witness to, or learning about acts that transgress deeply held moral beliefs and expectations.
- Moral injury requires an act of transgression that contradicts personal or shared expectation about the rules or the code of conduct, either during the event or at some point afterwards.

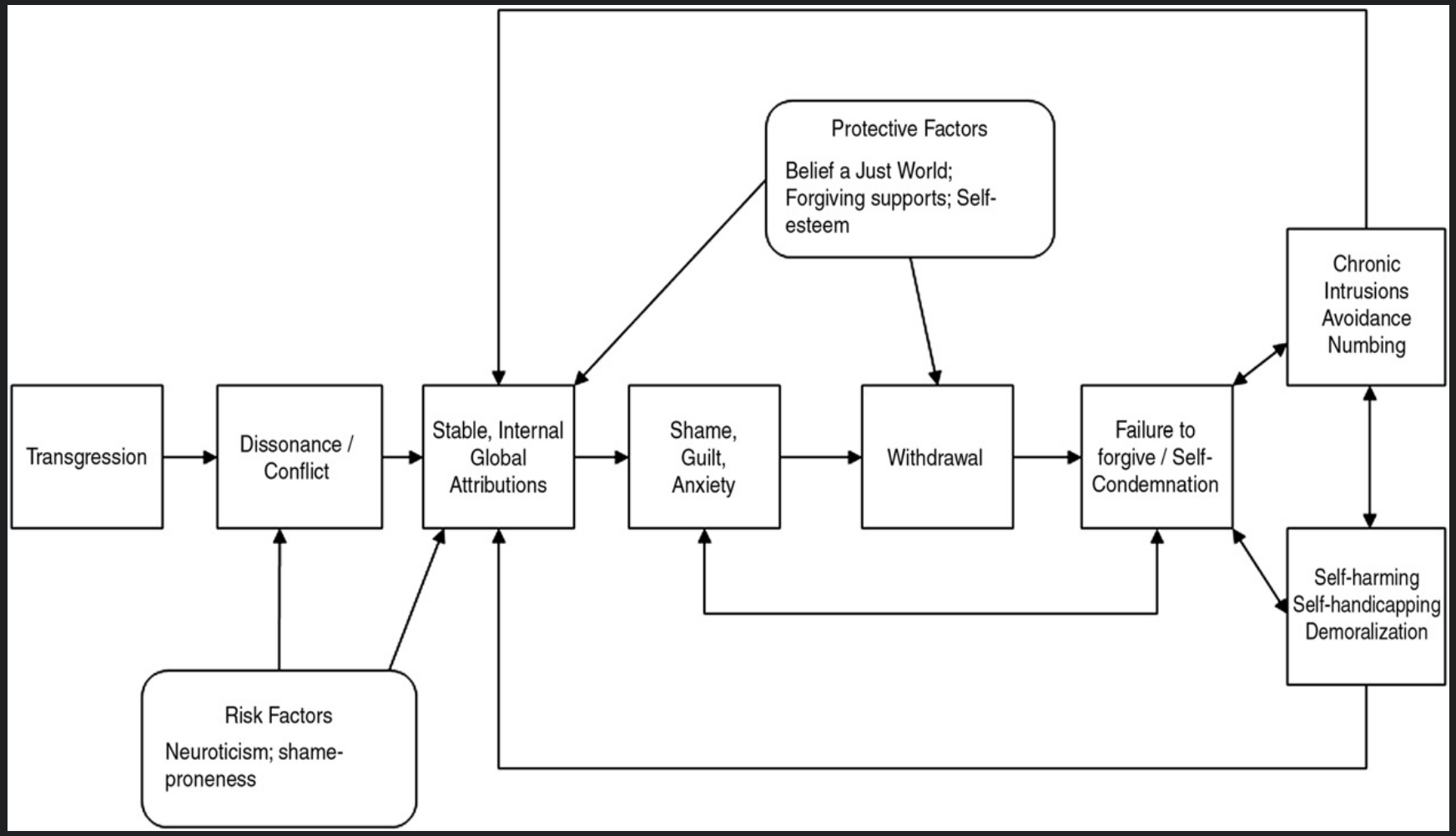
Litz, Stein, Delaney, Lebowitz, Nash, Silva, Maguen, 2009

Moral Injury Definition

- The event can be an act of wrongdoing, failing to prevent serious unethical behavior, or witnessing or learning about such an event.
- The individual also must be aware of the discrepancy between his or her morals and the experience (i.e., moral violation), causing dissonance and inner conflict.

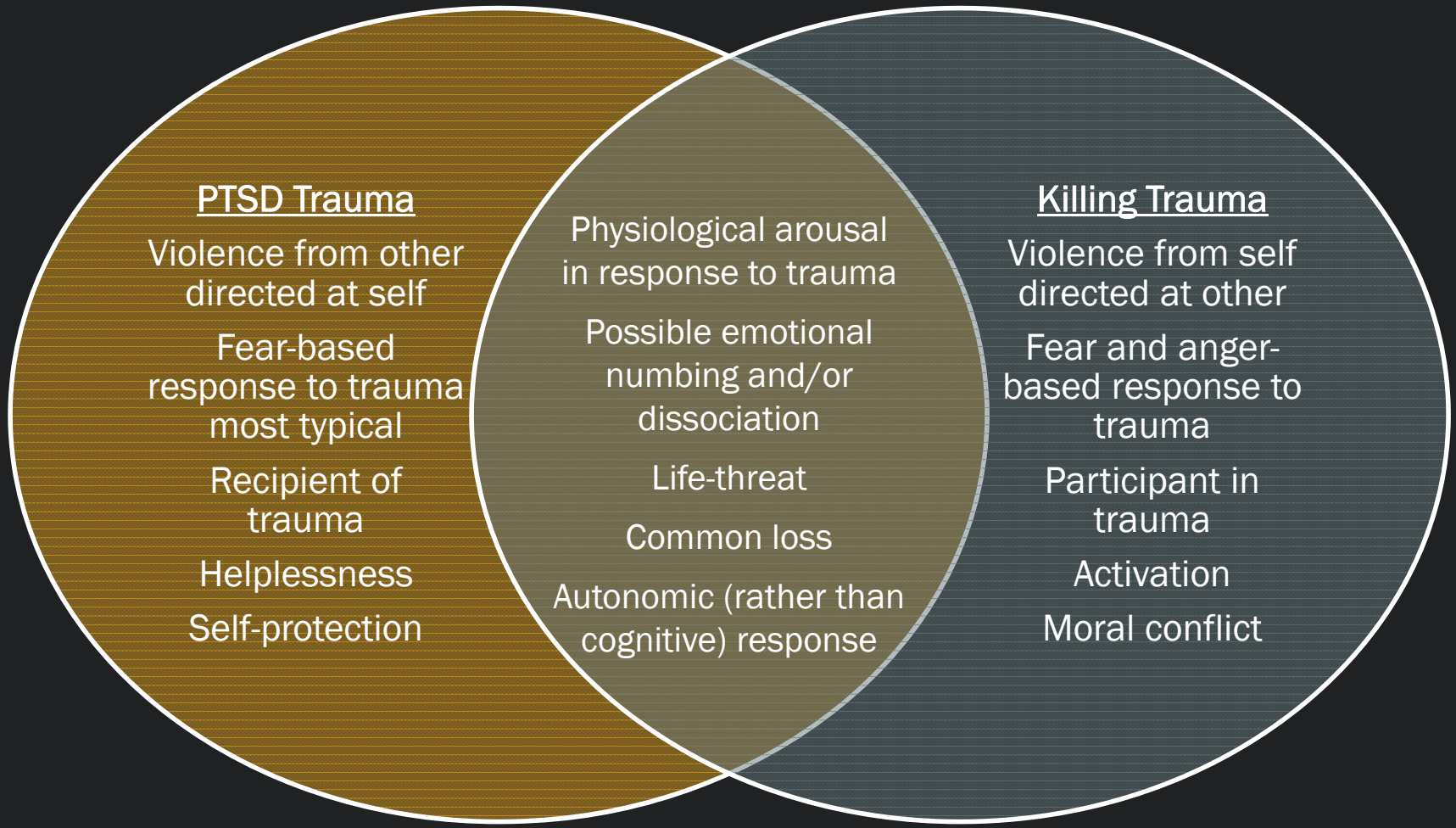
Litz, Stein, Delaney, Lebowitz, Nash, Silva, Maguen, 2009

Causal Framework for Moral Injury



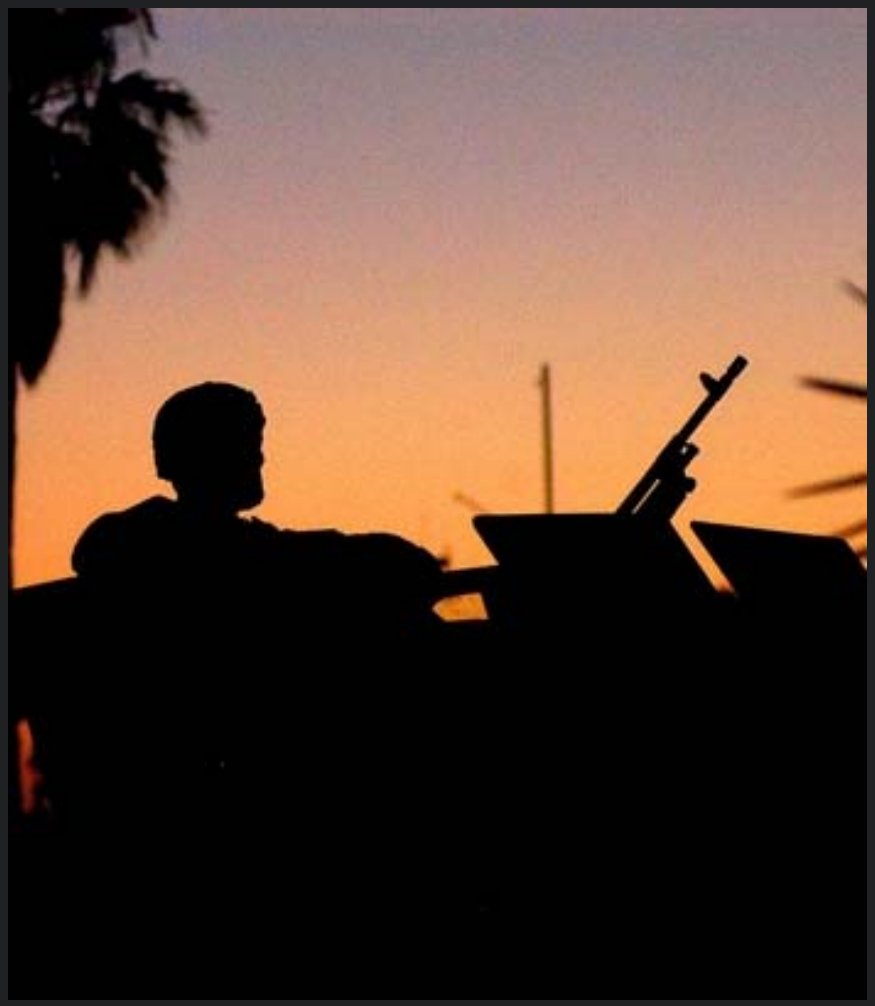
Litz, Stein, Delaney, Lebowitz, Nash, Silva, Maguen, 2009

Conceptual Model of PTSD-based Trauma and Killing Trauma



Background

- Modern wars involving close-range combat in urban environments increase the likelihood of military personnel taking a life
- 90% of Vietnam infantrymen fired at the enemy
- About 50% reported killing an enemy soldier
- One-third reported witnessing abusive violence



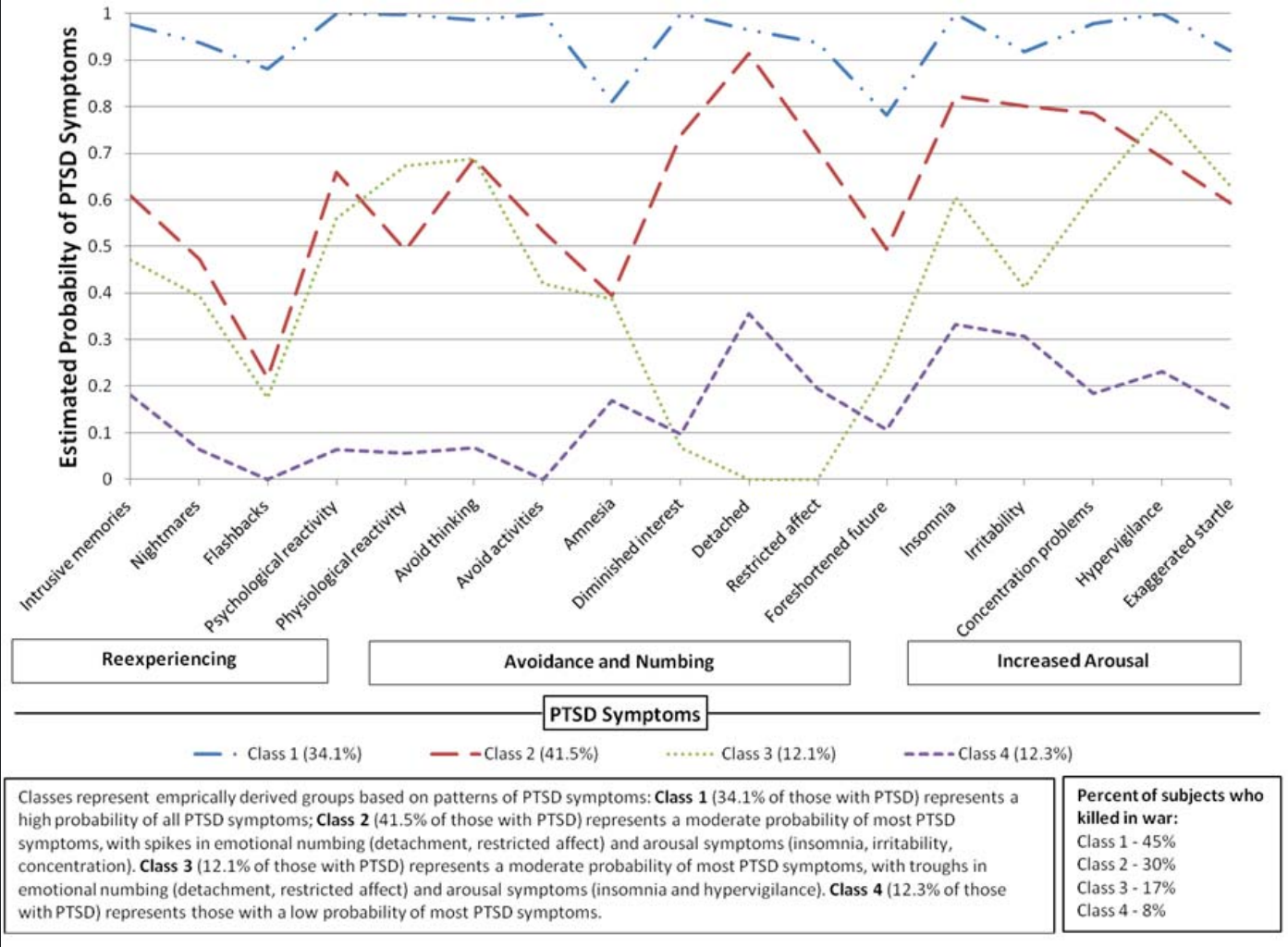
Laufer et al., 1984

Background

- 77% to 87% of Operation Iraqi Freedom (OIF) soldiers reported directing fire at the enemy
- 48% to 65% reported being responsible for the death of an enemy combatant
- 14% to 28% reported being responsible for the death of a noncombatant.

Laufer et al., 1984

Probability Plot of Endorsing PTSD Symptoms by Latent Class



Classes represent empirically derived groups based on patterns of PTSD symptoms: **Class 1** (34.1% of those with PTSD) represents a high probability of all PTSD symptoms; **Class 2** (41.5% of those with PTSD) represents a moderate probability of most PTSD symptoms, with spikes in emotional numbing (detachment, restricted affect) and arousal symptoms (insomnia, irritability, concentration). **Class 3** (12.1% of those with PTSD) represents a moderate probability of most PTSD symptoms, with troughs in emotional numbing (detachment, restricted affect) and arousal symptoms (insomnia and hypervigilance). **Class 4** (12.3% of those with PTSD) represents those with a low probability of most PTSD symptoms.

Percent of subjects who killed in war:
Class 1 - 45%
Class 2 - 30%
Class 3 - 17%
Class 4 - 8%

Killing Treatment: Impact of Killing Module

- CBT treatments provide a helpful base for killing treatment module, particularly when debilitating cognitions exist
- Killing treatment module designed to be used *after* vets have done some work talking about trauma
  - Does not have to be their killing-related trauma

Treatment Study Description

- Goal: to test feasibility, acceptability, and efficacy of a treatment module addressing the mental health and functional impact of killing in a war zone
- Participants randomly assigned to treatment or waitlist condition
  - Treatment available following waitlist
- 6- 8 sessions of individual psychotherapy
  - 60- 90 minutes each week
- Participants also asked to:
  - complete assessment measures
  - provide feedback re: the treatment

Eligibility Criteria

- Veterans 18-70 years of age who served in a combat zone
- Completed trauma-focused individual or group psychotherapy (e.g. CPT, PE)
- Impacted by killing in combat, or by feelings of responsibility for the death of others in combat (i.e. officers, medics)
- Ideally, abstinent from all substances
  - If not, willing to engage in harm reduction contract while active in study
- Not currently engaging in self-harming behaviors or in active crisis (e.g. homeless)

Treatment Overview

Session	Focus	Content
1	Pre-Treatment Evaluation	Assessment, Barriers to Treatment, and Coping Skills
2	Common Responses to Killing	Physiology, Emotions, and Cognitions
3	Cognitive-Behavioral Therapy (CBT) Elements	CBT Framework, Meaning of Killing, and Killing Cognitions
4	Becoming Unstuck *	CBT and Maladaptive Killing Cognitions (continued)
5	Forgiveness *	Defining Forgiveness and Barriers to Self-Forgiveness
6	Taking the Next Step	Forgiveness Letter, Making Amends, and Maintaining Gains

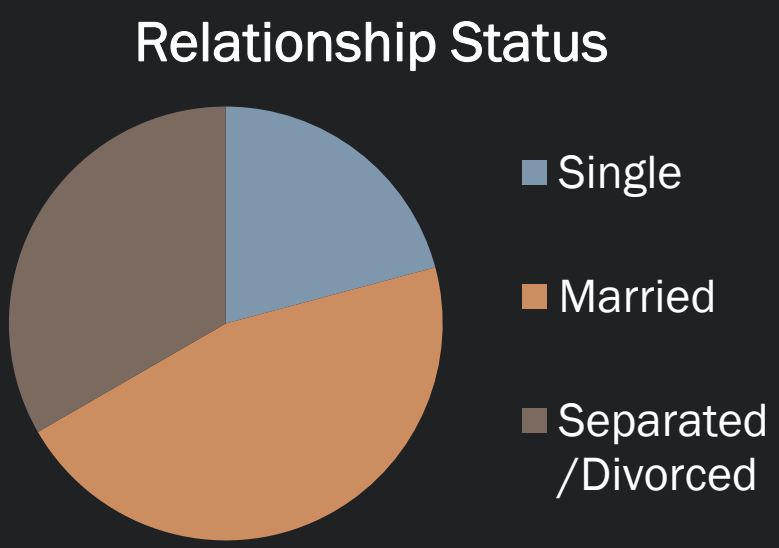
** Sessions 4 & 5 are often extended*

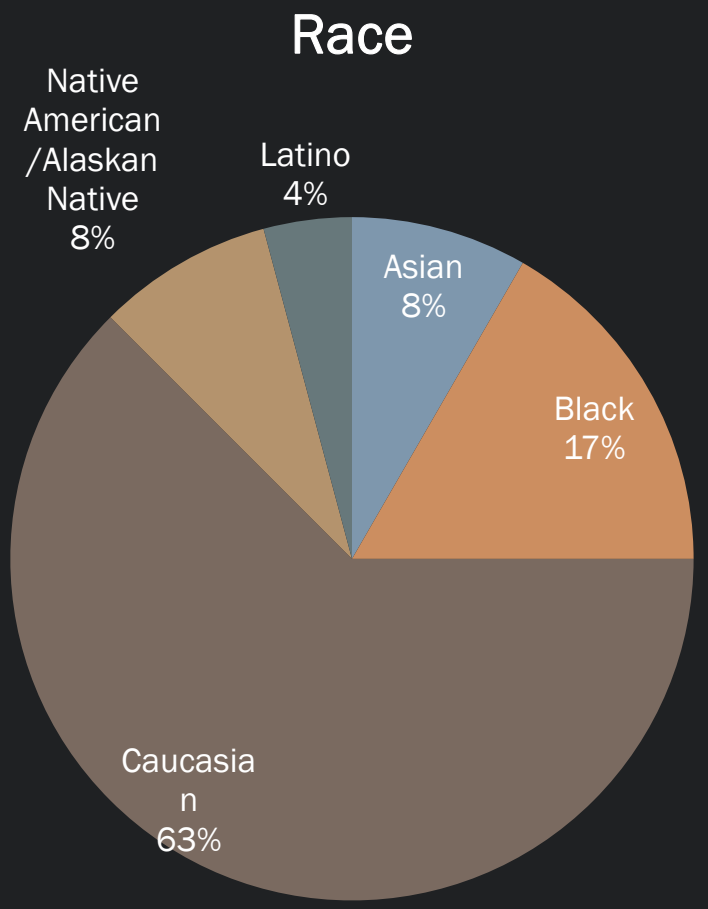
Measures

- Demographics
- PTSD symptoms; PTSD Checklist (PCL)
- Brief Symptom Inventory
- Killing-related maladaptive cognitions; Killing Cognition Scale (KCS)
- Post-treatment measure indexing change in Impact of Killing (IOK) treatment-related themes
- Acceptability and Feasibility Questionnaire

Demographics

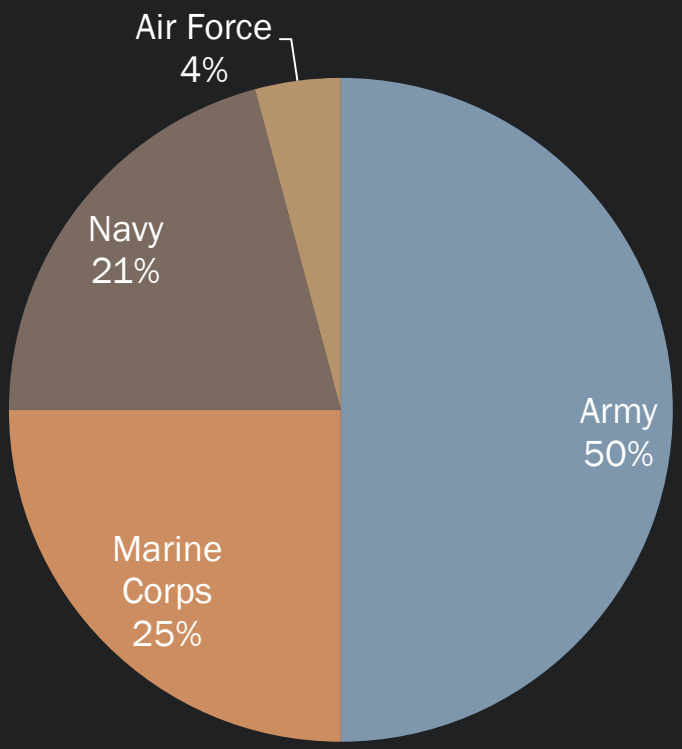
- N = 24
- **Age**: 59 ± 14.1 (SD)
- Age range 26-80 years
- **Gender**: 100% male



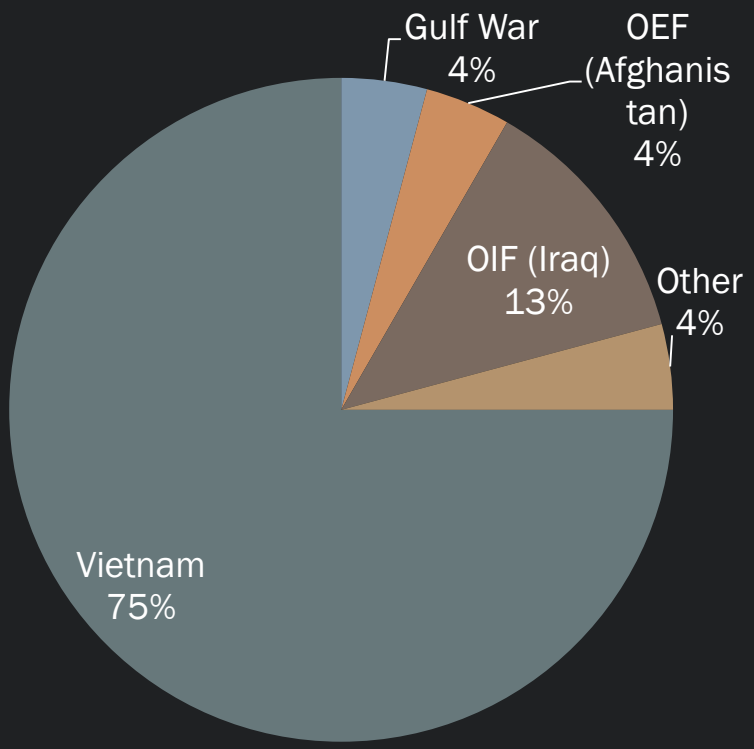


Military Service

Service Branch



operation



Discussion: Initial Findings

- Improvement in PTSD symptoms
- Shifts in killing-related cognitive domains, including
  - Self-concept
  - Spirituality
  - Self-forgiveness
  - Meaning
  - Functional domains (e.g., relationships).
- Treatment focused on the impact of killing is conceptualized as supplementary rather than as a replacement for existing EBTs for PTSD.

Discussion: Veteran Feedback

- Veteran self-assessment of areas of growth include (among others):
  - Acknowledgement that healing is an ongoing process
  - Greater self-acceptance and self-integration
  - Greater self-forgiveness
  - Increased self-compassion
  - Greater self-acceptance
  - Increased understating of killing events of the past
- Veterans reported that the 6-8 session treatment was acceptable and feasible in multiple domains.
- Most veterans wished that the treatment was longer.

Discussion: Study Design

Novel Aspects

- Exploration of killing-related cognitions and topics, addressed directly with an implicit goal of focusing on the impact of killing in war
  - Moral injury
  - Self-forgiveness
  - Loss

Limitations

- Small sample size (treatment is ongoing and recruitment continues)
- All male sample due to difficulty of finding eligible female veterans
  - We continue to prioritize recruitment of this group

Future Directions

- Qualitative feedback from participants is being analyzed to understand how to best implement this treatment among combat veterans with PTSD.
- We are currently conducting research among trauma providers to understand how to best incorporate evaluation and treatment of the impact of killing into existing systems of care.

Thank You

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