



Introduction and Measurement of Moral Injury

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Western

Disclosure

Relationships with commercial interests:

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Highlighted Projects

1. Military mental health
2. What is moral injury?
3. Why is it important?
4. What are the gaps?
5. Measuring moral injury
6. Moral Injury Outcome Scale
7. Other projects under way
8. Q&A



“

**The pendulum of the mind oscillates between sense and nonsense,
not between right and wrong.**

— Carl Gustav Jung

Canadian Armed Forces

97,625 Canadians serving in Canadian Armed Forces
461,240 Canadian Veterans
(Census 2021)

deployments include¹:

Iraq
Haiti
Congo
Egypt
South Sudan

NOW: 2000 deployed on approximately 20 missions

What to anticipate next year?

OSI in the CAF

Canadian Forces Mental Health Survey^{2,3}

	2002 	2013 
Any selected mental or alcohol disorder	15.1%	16.5%
MDD	7.6%	8.0%
PTSD	2.8%	5.3%
Generalized Anxiety Dis.	1.8%	4.7%
Social Phobia	3.6%	N/A
Panic	1.6%	3.4%

OSI in the CAF

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 **41%** of medically released suffered from OSI⁴

 **30%** seek mental health services after deployment⁵

 **2x** rate of suicides in **released** CAF personnel vs. civilian (25 y.o. & under)⁶

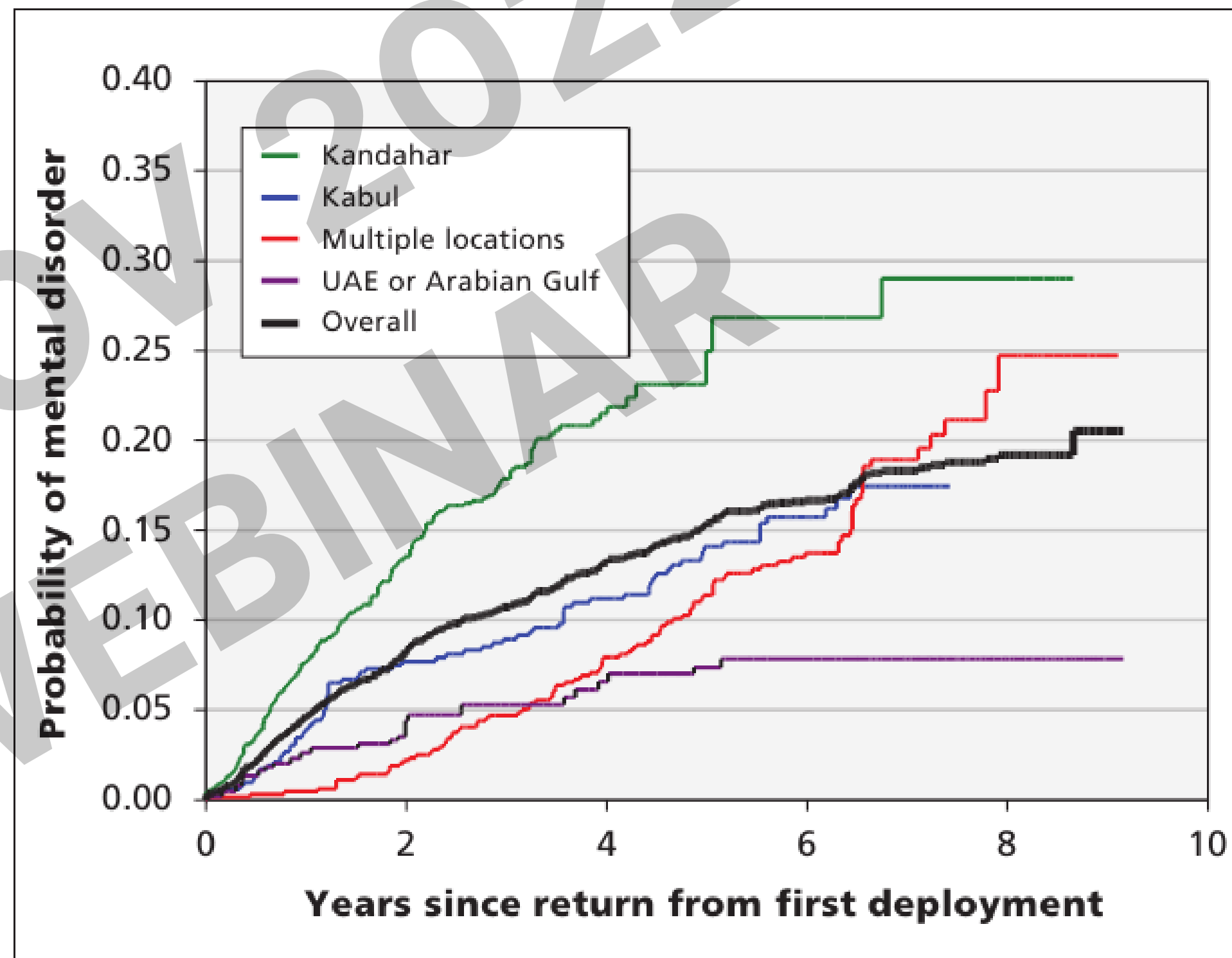
 **70%** of active personnel suicides are 29 years old or younger³²

OSI in the CAF

🇨🇦 13% received OSI during Afghanistan service⁵
8% PTSD
25% PTSD (combat heavy-zones)
6% MDD (60% co-morbid)

🇨🇦 Compared to civilian population:
10% lifetime prevalence of PTSD²¹
2.5% point prevalence of PTSD²¹

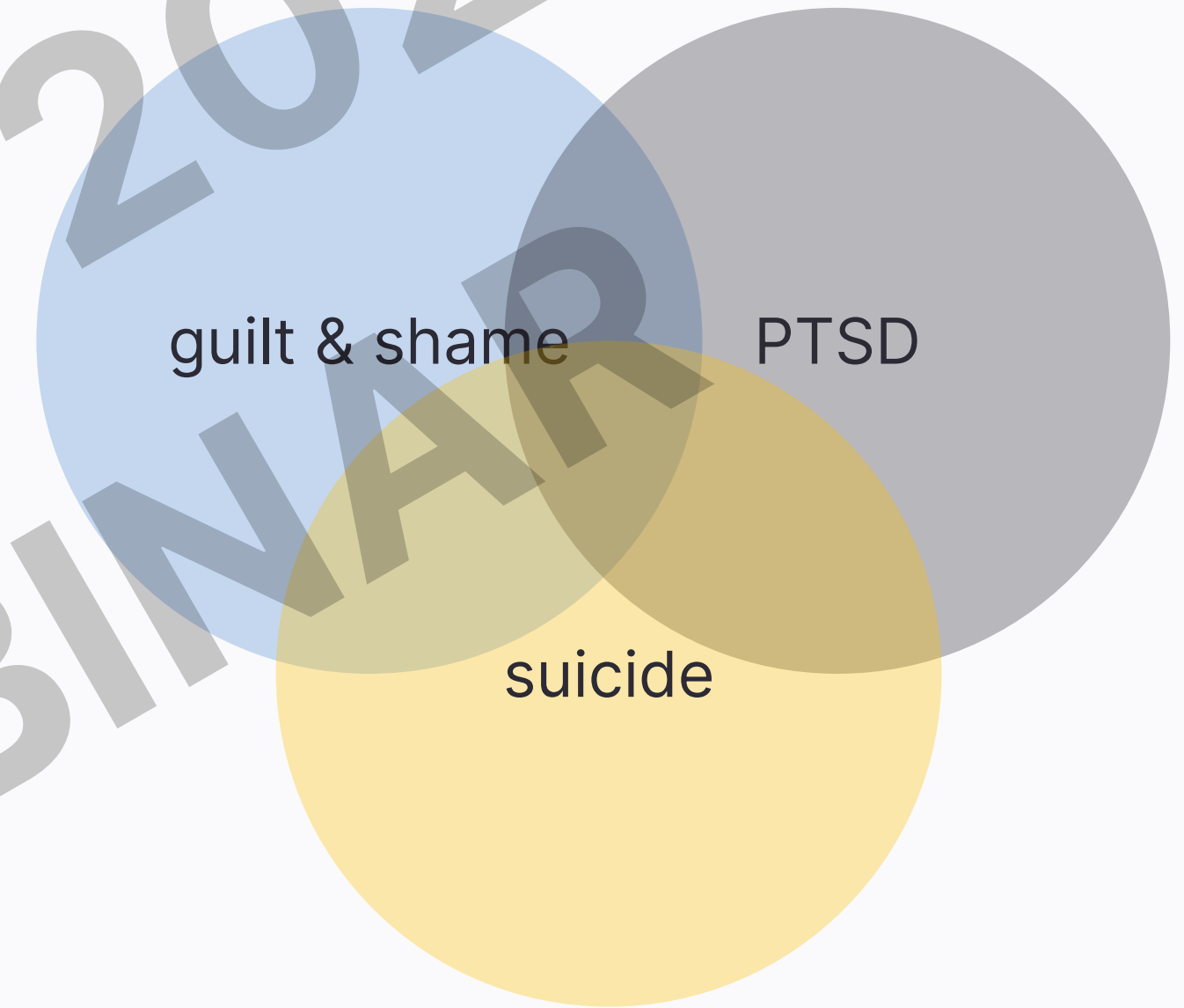
20-30% lifetime prevalence of PTSD of CAF
combat personnel^{21,22}



Guilt / Shame / PTSD overlap

guilt and shame are widely reported in PTSD²³⁻²⁵

both linked to suicide and suicidal ideation in military samples¹⁰⁻¹²



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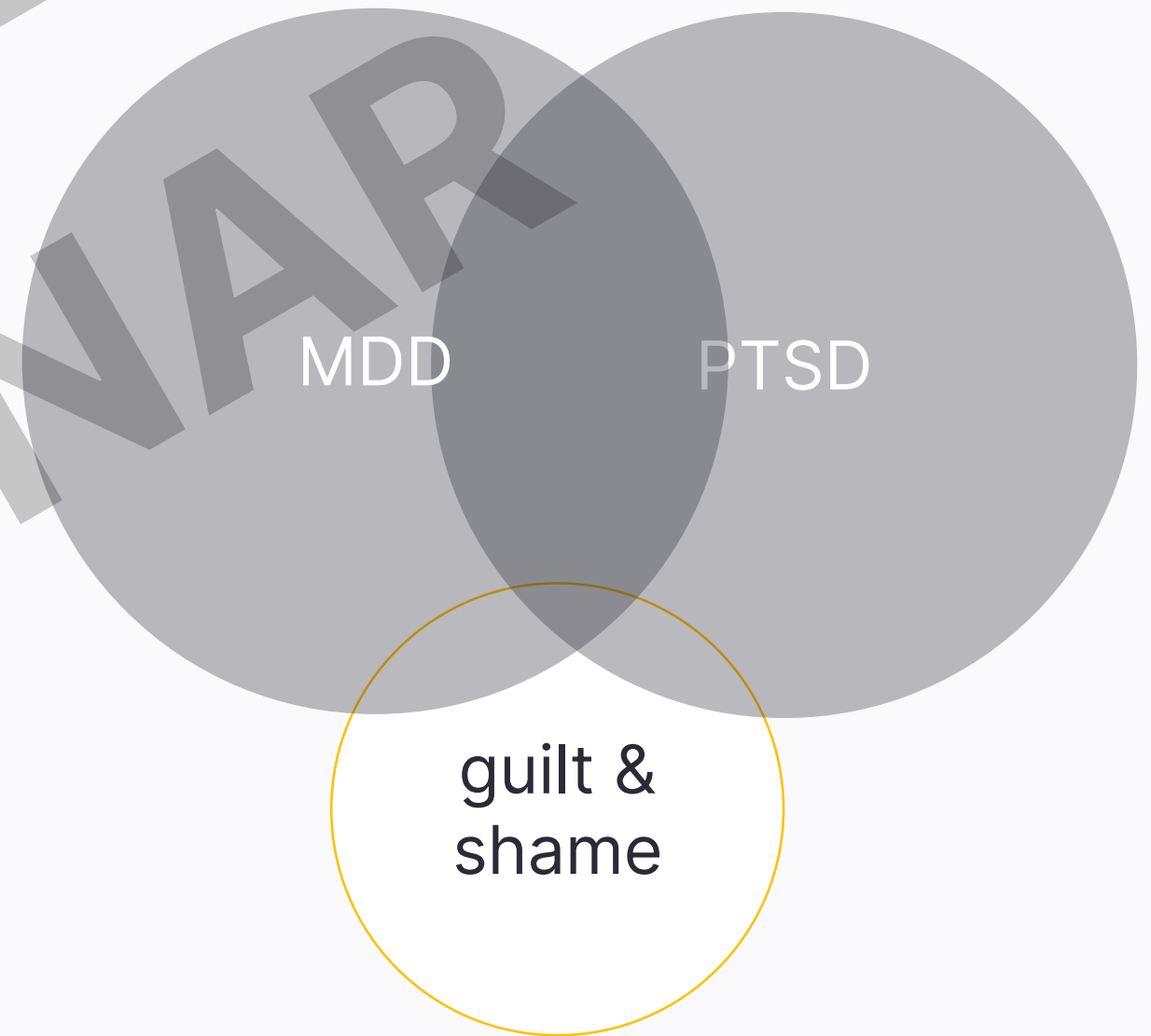
Guilt & Shame

Guilt in the DSM

common

complex cognitive and emotional experiences³⁷

arise when one perceives their behaviour to transgress an **internal moral standard**³⁸



Guilt / Shame / PTSD overlap

guilt better predictor of PTSD Sx than degree of combat exposure²⁴

lower guilt cognitions associated with PTSD resilience⁵⁹

shame symptoms temporally tied to PTSD onset²⁵

combat-related guilt better predictor of suicide than PTSD or MDD severity^{27,61,62}

Biomarker overlap^{63,64}



Guilt / Shame / PTSD overlap

For some, guilt & shame could be at the core of their distress.

Broken heart vs. racing heart



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shame and guilt⁴⁵⁻⁵²

evaluation of:	self	behaviour
due to:	personal inadequacies	context
rigidity:	stable over time	dynamic
future:	cannot be changed	reparation is possible
affect:	worthlessness powerlessness inferiority	tension regret remorse
psychological distress:	inward	outward
behaviour:	avoidance withdrawal	approach-and-amend
	self-condemnation	self-forgiveness



↑empathy⁵¹
↑ToM⁵⁰

shame and guilt⁴⁵⁻⁵²



MDD⁵⁴
PTSD⁵⁵
GAD⁵⁶

suicidal ideation⁵⁷



*only when paired
with shame^{49,58}

MH outcomes:

DSM



maladaptive
guilt



adaptive
guilt

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MEDLINE search hits

36,357 results

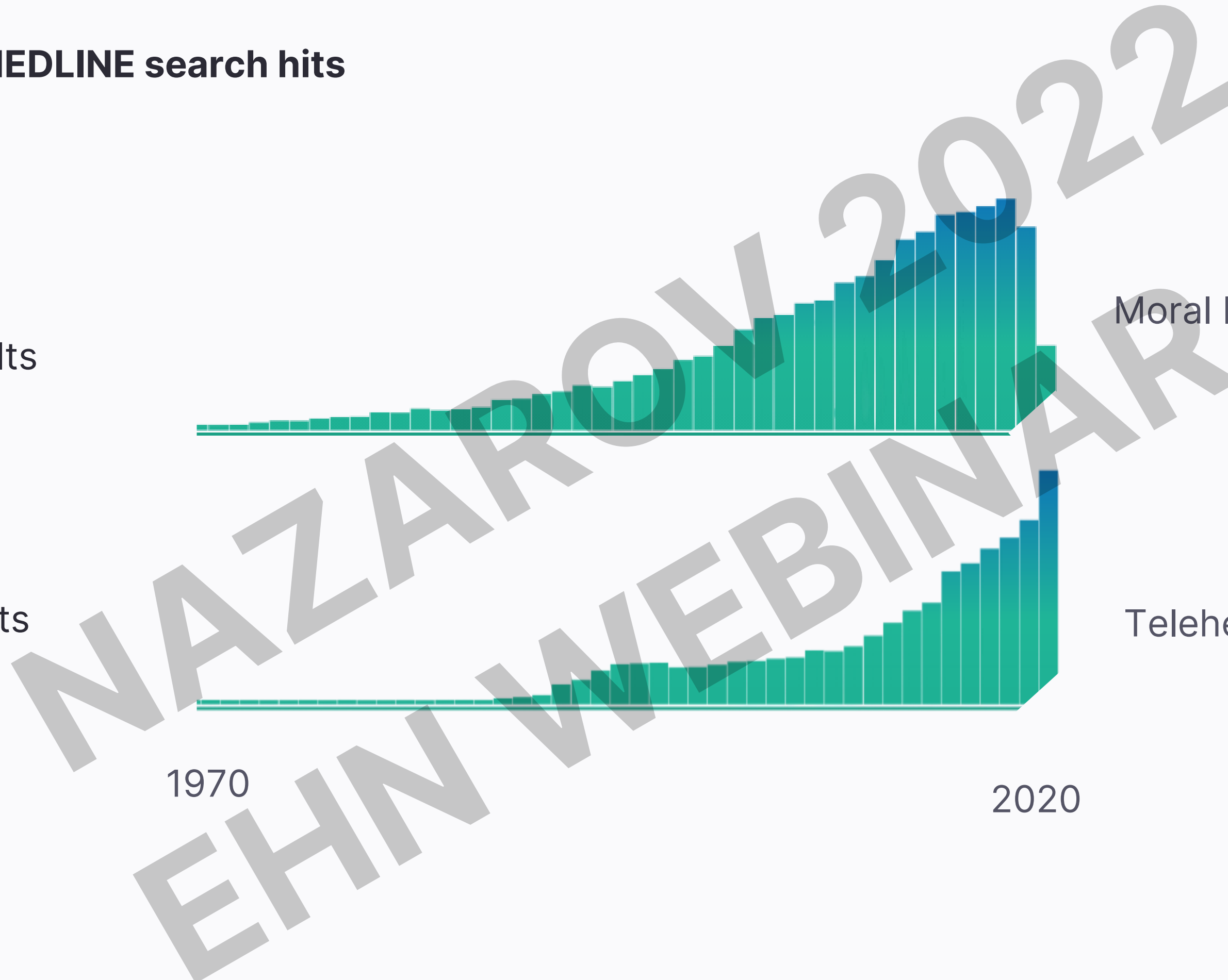
Moral Injury

39,177 results

Telehealth

1970

2020



Definition is unclear

Psychology

Philosophy

Social Work

Spirituality

Richardson, N., Lamson, A., et al.
Defining Moral Injury Among Military Populations: A Systematic Review. (2020).
Journal of Traumatic Stress.

Psychological distress

character wound

spiritual wound

“undoing of character”

Intrapersonal crisis

– Shay, 1994, Nash and Litz, 2013

in response to the

perpetration of

bearing witness to

failure to prevent

learning about

– Drescher et al., 1994

... any event that transgresses

Deeply held personal beliefs

subjective moral standards

one’s belief about “what’s right”

– Litz et al., 2013

Psychological distress

character wound

spiritual wound

"undoing of character"

Betrayal:

"betrayal of justice by a person of authority in a high-stakes situation" –

Shay 2014

... any event that transgresses

subjective moral standards

one's belief about "what's right"

– Litz et al., 2013

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Moral Injury

Psychological manifestations include, but not limited to:

Alterations in self-perception

Alterations in moral thinking

Relational impacts

Emotional aftermath

Self-harm

Spirituality

But also... symptoms of PTSD

Psychological Trauma (PTSD Criterion A)



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PMIE

Potentially morally injurious experience



PMIE

Potentially morally injurious experience



Moral Injury

Evolving construct

Currently, not a mental health diagnosis

- Classic PTSD symptoms and outcome measures do not capture all symptoms commonly associated with moral injury
- PMIE may not always meet PTSD Criterion A / psychological trauma

Dichotomy in the debate

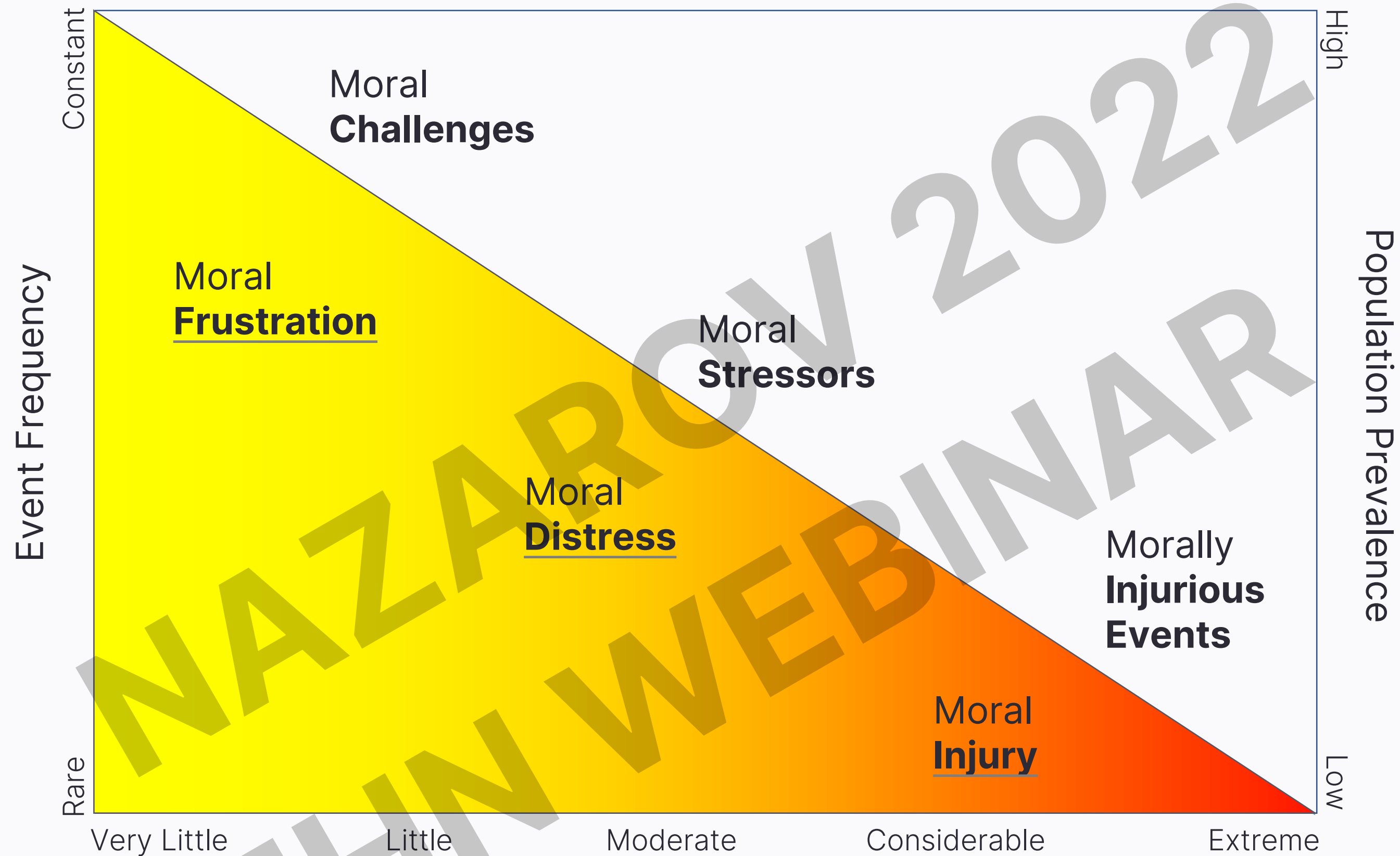
- For some, it's a term that "finally describes the essence of their struggle"
- From other perspectives, it may be a subtype of PTSD
- Whether moral injury is a construct independent of PTSD is still under debate (many signs point to yes...)



Who can be impacted?

Everyone.

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Degree of Mental, Social, and Spiritual Harm and Impairment

- Litz & Kerig, 2019



Who can be impacted?

Individuals who need to make difficult, moral-ethical decisions in high-stakes environments.

Military personnel
Health care workers
First responders
Legal

But no one is off limits...



Why is it important?

Common

Linked to poor outcomes

Difficult to treat



It's common

- Guilt and shame are widely reported in PTSD
- PMIEs are common
 - Over 50% of CAF personnel deployed to the mission in Afghanistan endorsed a PMIE – Nazarov, et al., 2018

Exposure to events that may trigger MI are common in military environments

Today's operations **go against schematic beliefs about warfare:**

Urban warfare

Unmarked enemy

Enemy deliberately plays against ethical standards

Combat, humanitarian aid, stabilization – all in one



“One of the consistent facts of wars is that they place people in terrible, often life-threatening situations that are shaped by conditions beyond their control. These situations can force people to make difficult choices between undesirable alternatives.” (Schulzke, 2013)

🇨🇦 Nazarov, Fikretoglu, Liu, Thompson, Zamorski (2018)

POTENTIALLY MORALLY INJURIOUS EVENTS (PMIEs) IN DEPLOYED CAF	% of pop	95%CI
Seen ill or injured women or children who you were unable to help	42.6	(41.1–44.2)
Ever felt responsible for the death of Canadian or ally personnel	7.4	(6.6–8.2)
Had difficulty distinguishing between combatants and noncombatants	38.4	(36.8–40.0)
<i>Any PMIE</i>	57.7	(56.1–59.2)

OP LASER...



**Linked to
adverse mental
health outcomes**

- Shame symptoms temporally tied to PTSD onset
- Canadian military context:
 - Those endorsing PMIE were 1.5-2.9x more likely to have 12-M PTSD – Nazarov, et al., 2018



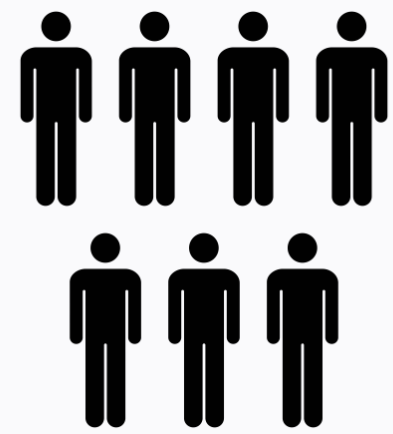
Challenging to treat

- Current/typical/common PTSD treatments may not be appropriate or effective
- Barriers to care
 - CAF pers with PMIEs are 2x more likely to seek help from civilian healthcare providers. – Nazarov, et al., 2020

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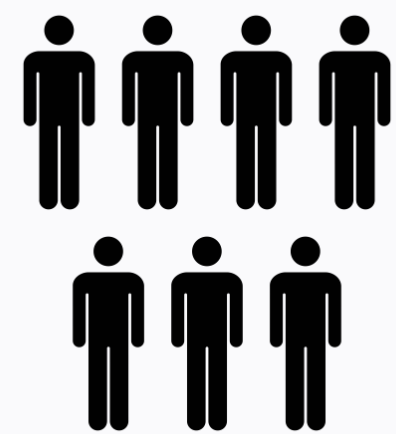
**What can we do about it?
Where do we go from here?**



PMIE



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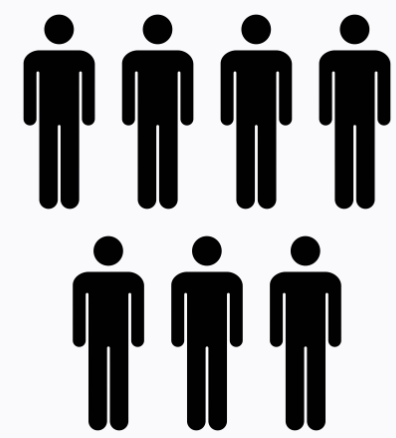


PMIE



Treatment

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PMIE



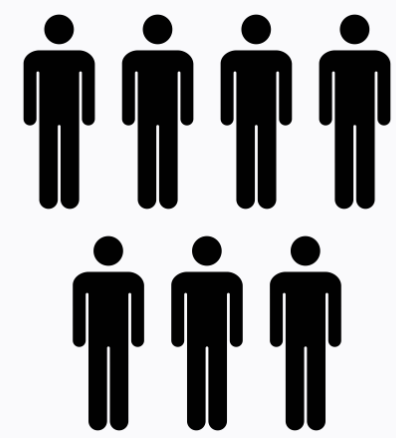
Prevention: Early Intervention

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Prevention: Avoid Exposure

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PMIE



Prevention: Prepare

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Treatment

Challenges and gaps

1. No valid method to **capture/assess** moral injury.
We need to know who to treat, and whether the treatment is effective.

Moral Injury Outcome Scale
(Litz, Plouffe, Nazarov, et al., 2022)



Treatment

Challenges and gaps

2. Ambiguous treatment targets and outcomes.

Identify targets and measure outcomes (MIOS).

Promising interventions are already being evaluated (meaning-making, adaptive disclosure).



Treatment

Challenges and gaps

3. Treatment coverage

Requires a diagnosis.

How to provide help to those who need it **now**?



Treatment

Challenges and gaps

4. Unlike for PTSD, no animal models for moral injury



Treatment

Challenges and gaps

5. Help-seeking avoidance

- confidentiality
- shame and guilt are socially withdrawing

Need to better understand barriers to care for moral injury



Prevention: Early Intervention

Challenges and gaps

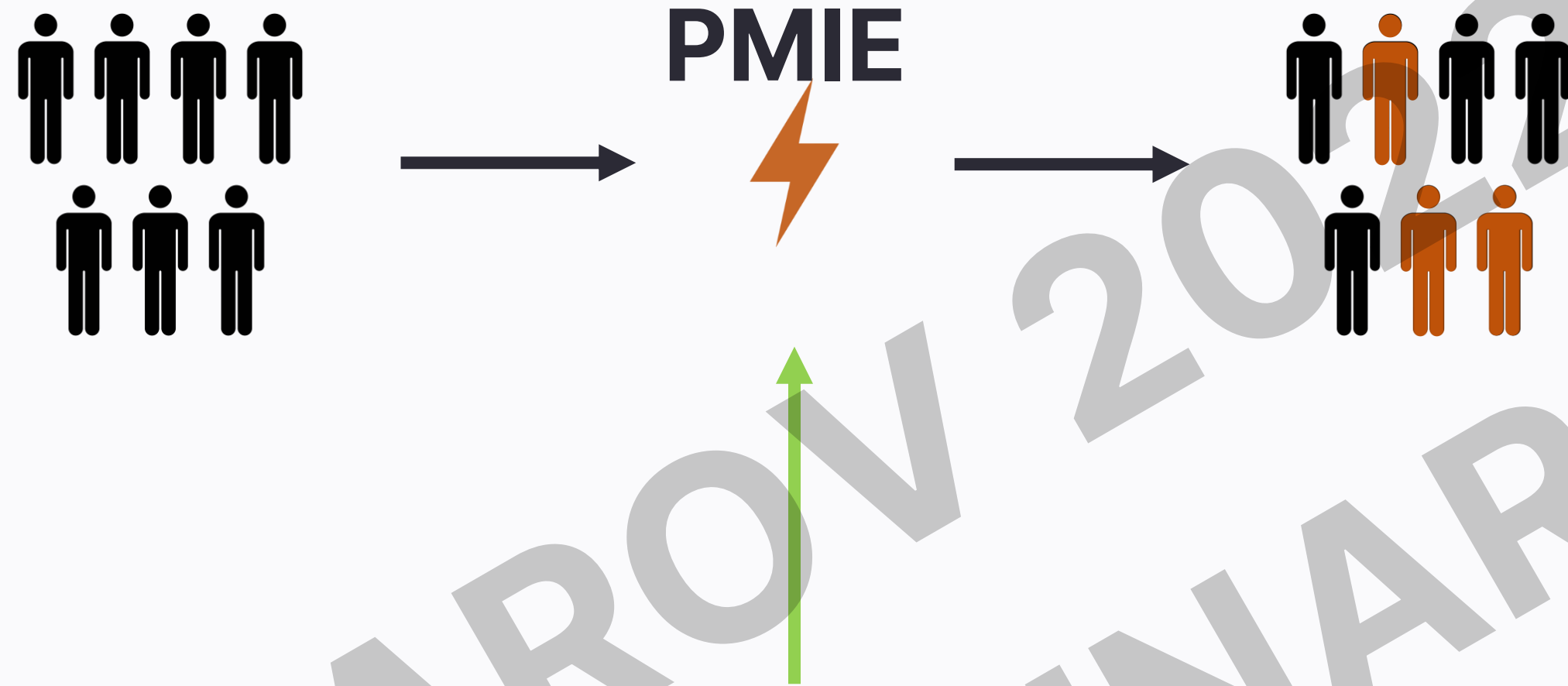
1. Link between exposure (PMIE) and outcome (MI) is ambiguous; not all PMIEs are the same.
2. What supports are required? Can we make things worse? Need data on outcome monitoring.
3. Interval between PMIE and adverse MH outcomes can be lengthy. Can we identify prodromal symptoms?



Prevention: Early Intervention

Challenges and gaps

4. Guilt and shame are necessary human emotions; natural response. What magnitude and impact is reasonable? For how long?



Prevention: Avoid Exposure

Challenges and gaps

1. For some population segments (e.g., occupations), this is not an option.
2. What isn't perceived to be a PMIE now, could be reframed as a PMIE later; Need to understand impact of culture.



Prevention: Prepare

Challenges and gaps

1. Long gap between training, exposure, and expression
2. What are the goals of preparation? How do we measure outcomes? How do we deliver the intervention effectively?

Measuring Moral Injury

- Many scales have been developed over the years
- Overlap/duplication across fields (moral injury – mil /moral distress – health care)
- Quality of scale development and psychometric performance is varied
- Issue with conflating exposure with expression

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Moral Injury Events Scale (MIES)

1. I saw things that were morally wrong.
2. I am troubled by having witnessed others' immoral acts.
3. I acted in ways that violated my own moral code or values.
4. I am troubled by having acted in ways that violated my own morals or values.
5. I violated my own morals by failing to do something that I felt I should have done.
6. I am troubled because I violated my morals by failing to do something I felt I should have done.
7. I feel betrayed by leaders who I once trusted.
8. I feel betrayed by fellow service members who I once trusted.
9. I feel betrayed by others outside the U.S. military who I once trusted.

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- **conflating exposure with expression**
- **expression not clinically relevant or targetable**
- **not linked to a specific experience/event**
- **cannot monitor change over time (not linked to time window)**
- **Demonstrated that scale does not perform well (psychometrically) in Canadian Veterans or active personnel (Plouffe et al., 2022)**

Measure of Moral Distress – Healthcare Professionals

Measures frequency of occurrence of a specific list of exposures

- Asks about distress associated with each exposure

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Distress Associated with Morally Distressing Exposures

Ordered by sample proportion from most distressing to least distressing



Systematic Review of MI Measures

1. Systematically collate all scales that have been developed (~20)
2. Assess alignment with conceptualizations of MI; assess domain coverage
3. Exposure vs expression distinction (outcome)
4. Assess quality of scale development processes
5. Assess quality of previous psychometric evidence

Provide recommendations to community regarding which measure is most appropriate for what use

Moral Injury Outcome Scale



Defining and Assessing the Syndrome of Moral Injury: Initial Findings of the Moral Injury Outcome Scale Consortium

Brett T. Litz^{1*}, Rachel A. Plouffe², Anthony Nazarov², Dominic Murphy³, Andrea Phelps⁴, Alanna Coady⁵, Stephanie A. Houle⁶, Lisa Dell⁴, Sheila Frankfurt⁷, Gadi Zerach⁸, Yossi Levi-Belz⁹ and the Moral Injury Outcome Scale Consortium

¹ Psychiatry Department, VA Boston Healthcare System, Boston University, Boston, MA, United States, ² Psychiatry Department, The MacDonald Franklin Operational Stress Injury Research Centre, University of Western Ontario, London, ON, Canada, ³ King's Centre for Military Health Research, Kings College London, London, United Kingdom, ⁴ Psychology Department, Phoenix Australia - Centre for Posttraumatic Mental Health, University of Melbourne, Melbourne, VIC, Australia, ⁵ VA Boston Healthcare System, Boston, MA, United States, ⁶ Psychology Department, University of Ottawa, Ottawa, ON, Canada, ⁷ Center of Excellence for Research on Returning War Veterans, Central Texas Veterans Health Care System, Temple, TX, United States, ⁸ Psychology Department, Ariel University, Ariel, Israel, ⁹ Behavioral Sciences Department, Ruppin Academic Center, Emek Hefer, Israel

Moral Injury Outcome Scale

- Moral Injury Outcome Scale (MIOS) (Litz, Plouffe, Nazarov, et al., 2022, Front. Psychiatry)
- Scale development as part of the International Moral Injury Outcome Scale Consortium
- 7 years of development, starting from ground up (interviews with clinicians, patients, across different countries, careful selection of content domains, item generation (~300), item reduction, cross-cultural invariance testing)
- **14-items** assessing self-reported **past month outcomes/symptoms** related to the **most disturbing event** of their life that was related to a **violation of important moral values**
 - Shame-related Outcomes
 - Trust Violation-related Outcomes
- Characterizing type of experience
- Designed for in-person or remote administration; different versions for ease of application

MIOS - F

This questionnaire asks about experiences you may have had after a very stressful experience in which:

- **You did something (or failed to do something)** that went against your moral code or values (e.g., you harmed someone or failed to protect someone from harm), or
- **You saw someone** (or people) do something or fail to do something that went against your moral code or values (e.g., you witnessed cruel behaviour), or
- **You were directly affected** by someone doing something or failing to do something that went against your moral code or values (e.g., being betrayed by someone you trusted).

1. Have you had an experience (or experiences) as described above?

Yes

No →

STOP

You do not have to complete this questionnaire.



Please answer questions A-C while thinking about the **worst event that currently bothers you the most**. This could be one of the examples above, or some other very stressful experience that went against your core values.

A. Did the event involve something you did or failed to do?

Yes

No

B. Did the event involve observing someone else acting (or failing to act)?

Yes

No

C. Did the event involve being directly impacted by someone else (or people) acting (or failing to act)?

Yes

No

For events that had multiple features, which aspect was the worst (A, B, or C) _____?

2. In what year did this event happen _____?

3. Did the event involve actual or threatened death, serious injury, or sexual violence?

Yes

No

4. In the past month, have you...

Yes

No

A. had nightmares about the event or thought about the event when you did not want to?

B. tried hard not to think about the event or went out of your way to avoid situations that reminded you of the event(s)?

C. been constantly on guard, watchful, or easily startled?

D. felt numb or detached from people, activities, or your surroundings?

E. felt guilty or unable to stop blaming yourself or others for the event(s) or any problems the event(s) may have caused?

5. If you feel comfortable, briefly describe the worst event:

Keeping this worst event in mind, please read each of these statements and circle one of the numbers to the right to indicate how much you would agree with the statement in the past month.

		Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
1.	I blame myself.	0	1	2	3	4
2.	I have lost faith in humanity.	0	1	2	3	4
3.	People would hate me if they really knew me.	0	1	2	3	4
4.	I have trouble seeing goodness in others.	0	1	2	3	4
5.	People don't deserve second chances.	0	1	2	3	4
6.	I am disgusted by what happened.	0	1	2	3	4
7.	I feel like I don't deserve a good life.	0	1	2	3	4
8.	I keep myself from having success.	0	1	2	3	4
9.	I no longer believe there is a higher power.	0	1	2	3	4
10.	I lost trust in others.	0	1	2	3	4
11.	I am angry all the time.	0	1	2	3	4
12.	I am not the good person I thought I was.	0	1	2	3	4
13.	I have lost pride in myself.	0	1	2	3	4
14.	I cannot be honest with other people.	0	1	2	3	4

How much has this experience made it hard for you to function in each of the following areas? Circle one number for each item below. If an area is not applicable, circle N/A.

		Not at all		Somewhat			Extremely		
1.	Romantic relationships with spouse or partner	0	1	2	3	4	5	6	N/A
2.	Relationships with your children	0	1	2	3	4	5	6	N/A
3.	Relationships with other family members	0	1	2	3	4	5	6	N/A
4.	Friendships or socializing	0	1	2	3	4	5	6	N/A
5.	Professional (work, education, training)	0	1	2	3	4	5	6	N/A
6.	Hobbies and recreation activities that you do alone	0	1	2	3	4	5	6	N/A
7.	Hobbies and recreation activities that you do with others	0	1	2	3	4	5	6	N/A
8.	Religious faith/spirituality	0	1	2	3	4	5	6	N/A
9.	Day to day activities, such as chores, errands, finances, health	0	1	2	3	4	5	6	N/A

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CORE MIOS

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MIOS - F

SCREENER

This questionnaire asks about experiences you may have had after a very stressful experience in which:

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2. I have lost faith in humanity.	0	1	2	3	4
3. People would hate me if they really knew me.	0	1	2	3	4
4. I have trouble seeing goodness in others.	0	1	2	3	4
5. People don't deserve second chances.	0	1	2	3	4
6. I am disgusted by what happened.	0	1	2	3	4
7. I feel like I don't deserve a good life.	0	1	2	3	4
8. I keep myself from having success.	0	1	2	3	4
9. I no longer believe there is a higher power.	0	1	2	3	4
10. I lost trust in others.	0	1	2	3	4
11. I am angry all the time.	0	1	2	3	4
12. I am not the good person I thought I was.	0	1	2	3	4
13. I have lost pride in myself.	0	1	2	3	4
14. I cannot be honest with other people.	0	1	2	3	4

PMIE DETAILS

Please answer questions A-C while thinking about the **worst event that currently bothers you the most**. This could be one of the examples above, or some other very stressful experience that went against your core values.

A. Did the event involve something you did or failed to do?

Yes

No

B. Did the event involve observing someone else acting (or failing to act)?

Yes

No

C. Did the event involve being directly impacted by someone else (or people) acting (or failing to act)?

Yes

No

For events that had multiple features, which aspect was the worst (A, B, or C) _____?

2. In what year did this event happen _____?

3. Did the event involve actual or threatened death, serious injury, or sexual violence?

Yes

No

4. In the past month, have you...

Yes

No

A. had nightmares about the event or thought about the event when you did not want to?

B. tried hard not to think about the event or went out of your way to avoid situations that reminded you of the event(s)?

C. been constantly on guard, watchful, or easily startled?

D. felt numb or detached from people, activities, or your surroundings?

E. felt guilty or unable to stop blaming yourself or others for the event(s) or any problems the event(s) may have caused?

5. If you feel comfortable, briefly describe the worst event:

PMIE DETAILS

PTSD SCREEN

FUNCTIONAL

How much has this experience made it hard for you to function in each of the following areas? Circle one number for each item below. If an area is not applicable, circle N/A.

	Not at all		Somewhat			Extremely		
1. Romantic relationships with spouse or partner	0	1	2	3	4	5	6	N/A
2. Relationships with your children	0	1	2	3	4	5	6	N/A
3. Relationships with other family members	0	1	2	3	4	5	6	N/A
4. Friendships or socializing	0	1	2	3	4	5	6	N/A
5. Professional (work, education, training)	0	1	2	3	4	5	6	N/A
6. Hobbies and recreation activities that you do alone	0	1	2	3	4	5	6	N/A
7. Hobbies and recreation activities that you do with others	0	1	2	3	4	5	6	N/A
8. Religious faith/spirituality	0	1	2	3	4	5	6	N/A
9. Day to day activities, such as chores, errands, finances, health	0	1	2	3	4	5	6	N/A

MIOS - F

This questionnaire asks about experiences you may have had after a very stressful experience in which:

- **You did something (or failed to do something)** that went against your moral code or values (e.g., you harmed someone or failed to protect someone from harm), or
- **You saw someone** (or people) do something or fail to do something that went against your moral code or values (e.g., you witnessed cruel behaviour), or
- **You were directly affected** by someone doing something or failing to do something that went against your moral code or values (e.g., being betrayed by someone you trusted).

1. Have you had an experience (or experiences) as described above?

Yes

No

STOP

You do not have to complete this questionnaire.

Please answer questions A-C while thinking about the worst event that currently bothers you the most. This could be one of the examples above, or some other very stressful experience that went against your core values.

A. Did the event involve something you did or failed to do?

Yes

No

B. Did the event involve observing someone else acting (or failing to act)?

Yes

No

C. Did the event involve being directly impacted by someone else (or people) acting (or failing to act)?

Yes

No

For events that had multiple features, which aspect was the worst (A, B, or C) ____?

2. In what year did this event happen _____?

3. Did the event involve actual or threatened death, serious injury, or sexual violence?

Yes

No

4. In the past month, have you...

Yes

A. had nightmares about the event or thought about the event when you did not want to?

B. tried hard not to think about the event or went out of your way to avoid situations that reminded you of the event(s)?

C. been constantly on guard, watchful, or easily startled?

D. felt numb or detached from people, activities, or your surroundings?

E. felt guilty or unable to stop blaming yourself or others for the event(s) or any problems the event(s) may have caused?

5. If you feel comfortable, briefly describe the worst event:

Keeping this worst event in mind, please read each of these statements and circle one of the numbers to the right to indicate how much you would agree with the statement in the past month.

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
1. I blame myself.	0	1	2	3	4
2. I have lost faith in humanity.	0	1	2	3	4
3. People would hate me if they really knew me.	0	1	2	3	4
4. I have trouble seeing goodness in others.	0	1	2	3	4
5. People don't deserve second chances.	0	1	2	3	4
6. I am disgusted by what happened.	0	1	2	3	4
7. I feel like I don't deserve a good life.	0	1	2	3	4
8. I keep myself from having success.	0	1	2	3	4
9. I no longer believe there is a higher power.	0	1	2	3	4
10. I lost trust in others.	0	1	2	3	4
11. I am angry all the time.	0	1	2	3	4
12. I am not the good person I thought I was.	0	1	2	3	4
13. I have lost pride in myself.	0	1	2	3	4
14. I cannot be honest with other people.	0	1	2	3	4

How much has this experience made it hard for you to function in each of the following areas? Circle one

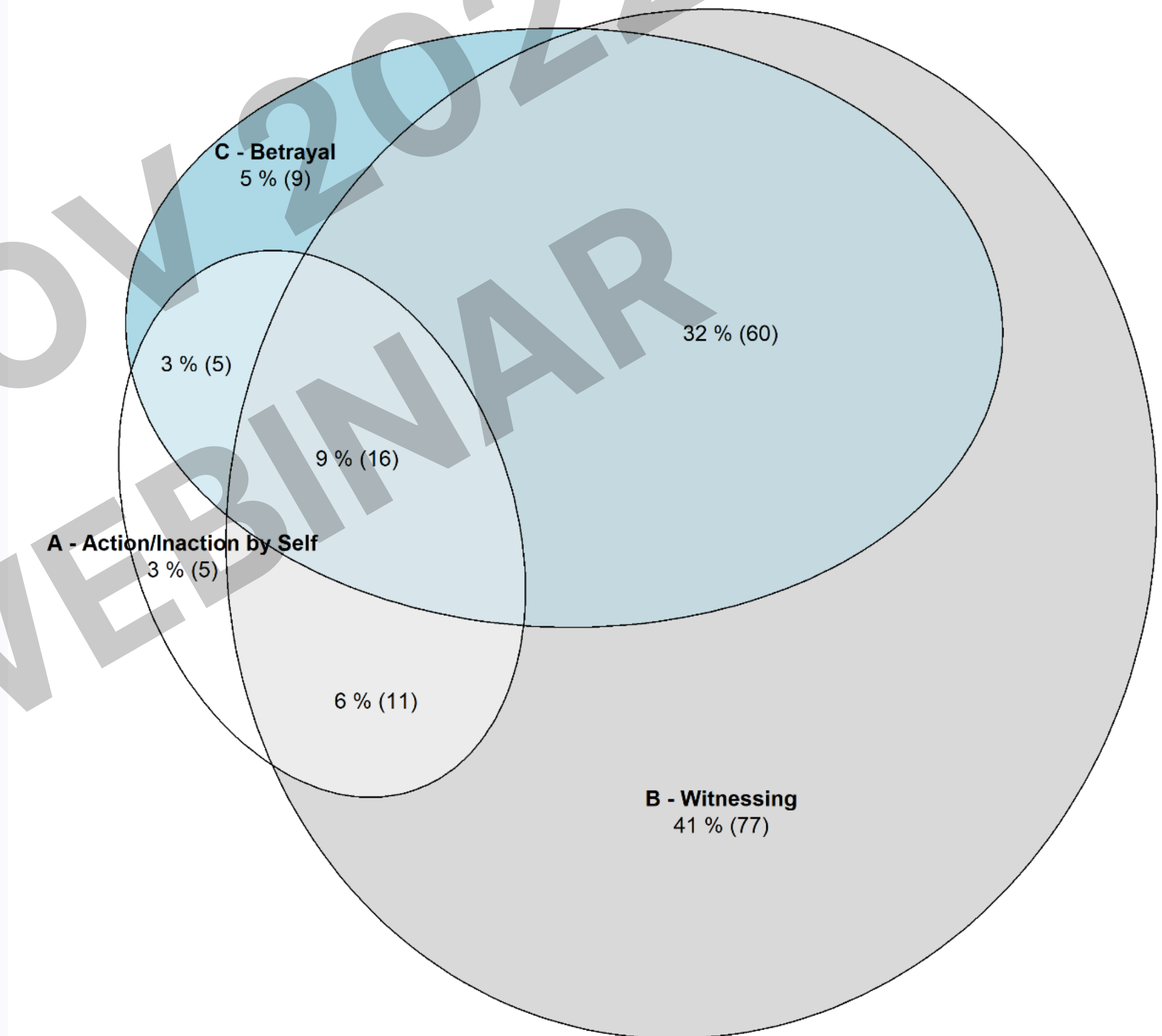
How much has this experience made it hard for you to function in each of the following areas? Circle one number for each item below. If an area is not applicable, circle N/A.

	Not at all		Somewhat			Extremely		
	0	1	2	3	4	5	6	
1. Romantic relationships with spouse or partner	0	1	2	3	4	5	6	N/A
2. Relationships with your children	0	1	2	3	4	5	6	N/A
3. Relationships with other family members	0	1	2	3	4	5	6	N/A
4. Friendships or socializing	0	1	2	3	4	5	6	N/A
5. Professional (work, education, training)	0	1	2	3	4	5	6	N/A
6. Hobbies and recreation activities that you do alone	0	1	2	3	4	5	6	N/A
7. Hobbies and recreation activities that you do with others	0	1	2	3	4	5	6	N/A
8. Religious faith/spirituality	0	1	2	3	4	5	6	N/A
9. Day to day activities, such as chores, errands, finances, health	0	1	2	3	4	5	6	N/A

Op LASER

~32% indicated experiencing a morally injurious event (i.e., the most disturbing event of their life that was related to a violation of important values, principles) at some point in their lives **AND** attributed their worst morally injurious experience to Op LASER.

Experiences not mutually exclusive in terms of PMIE type. Many reported experiences that had aspects of both betrayal and witnessing others transgress moral standards.



Moral Injury Outcome Scale

Scale Versions

Depending on administrators needs and contexts, different versions of the MIOS have been created to facilitate optimal data collection needs. In each of the versions, the core 14 items of the MIOS are always included.

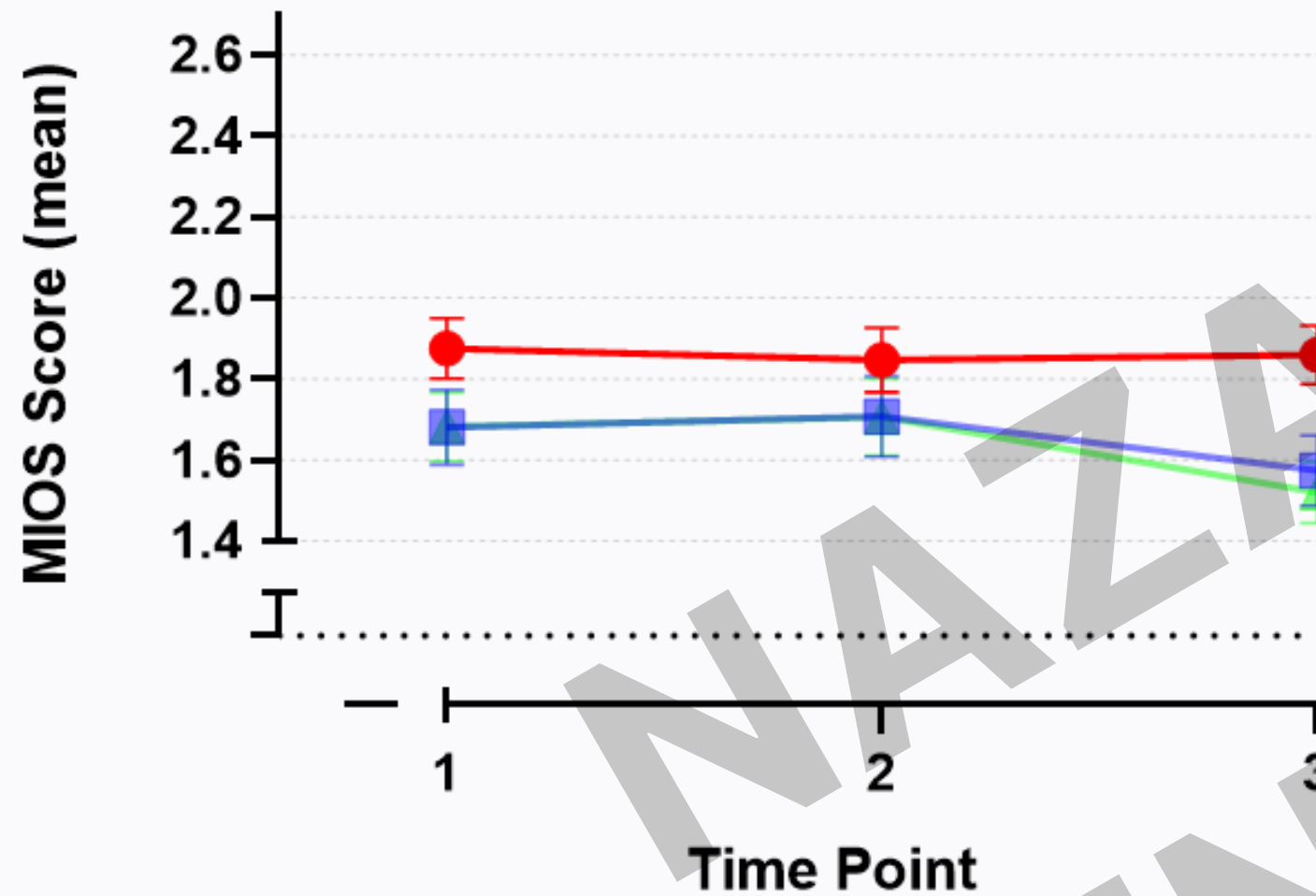
	Full Version (F)	Clinical (C)	Abbreviated (A)
Exposure Classification	Extended classification of potentially morally injurious experience; includes date and description of event	Only classification of potentially morally injurious experience	Only whether a potentially morally injurious experience was experienced
PTSD Screen	Yes	No	No
Core MIOS	FULL 14 ITEMS OF MIOS ALWAYS INCLUDED		
Functional Outcomes	Yes	Yes	No

Moral Injury Outcome Scale

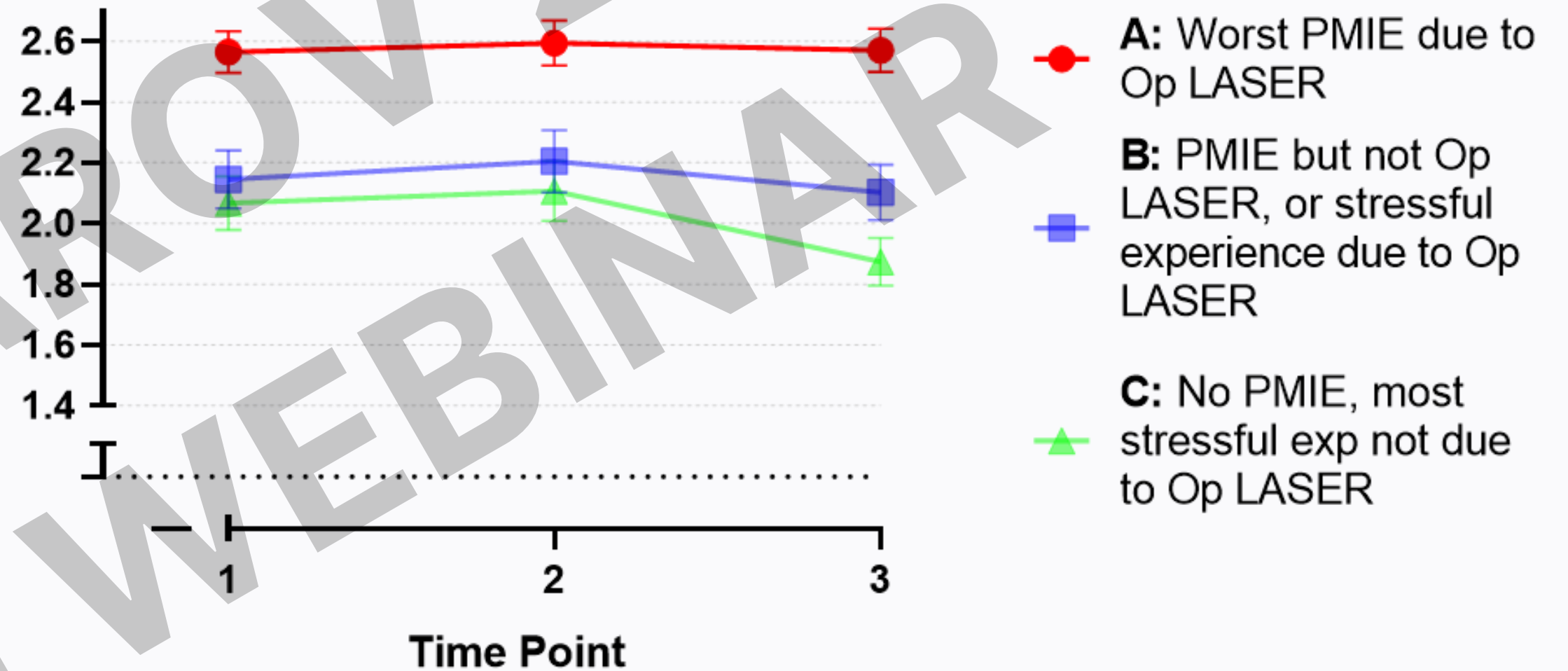
- Why is this scale so important to the field?
 - **Linked to event**
 - **Significant efforts into ensuring gold standard scale development techniques and psychometric testing**
 - **Adequately measures outcomes (symptoms are targets in clinical setting, can monitor outcomes as part of measurement-based care)**
 - **Adequately classifies exposure type**
 - **Test-retest reliability**
 - **Scale is intentionally designed to be population-agnostic -> can be applied to any individual (i.e., not military-specific)**
 - **French language version available**

Op LASER

MIOS - Shame-related Outcomes



MIOS - Trust Violation-related Outcomes



- A:** Worst PMIE due to Op LASER
- B:** PMIE but not Op LASER, or stressful experience due to Op LASER
- C:** No PMIE, most stressful exp not due to Op LASER

National Health Care Worker Survey

- ~ 1500 Canadian HCWs working during the pandemic
- Longitudinal, 1.5 year study
- MIOS, specifically, trust violation-related outcomes, predicted **intention to leave job**
- Adding PTSD, Depression, Anxiety symptoms and burnout severity added minimal predictive power above and beyond MIOS.
- Analyses ongoing

NAZAROV 2022
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Other Projects and Next Steps

- Longitudinal outcomes using MIOS to track trajectories (embedded in clinical settings)
 - Significant uptake of MIOS use across organizations, nationally and internationally
- Understanding exposure
 - what are PMIEs?
 - How do we reconcile them with current understanding of Criterion A?
 - How do we improve the ways we measure trauma exposure?
- Are individuals with MI avoiding care? How do we reduce barriers?
- Moral injury “caseness”

Thank you

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