Acceptance and Commitment Therapy for Moral Injury (ACT-MI): Moving with Moral Pain Towards a Meaningful Life

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Lauren M. Borges, Ph.D.
Clinical Research Psychologist
VA Rocky Mountain MIRECC for Veteran Suicide Prevention
Lauren.Borges2@va.gov
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• Sean Barnes (Co-PI), Jacob Farnsworth (Co-I), Robyn Walser (Co-I), Kent Drescher (Co-I), Wyatt Evans (Co-I), Craig Rosen (Co-I), Lisa Brenner (Consultant), Jason Nieuwsma (Consultant), and Joseph Currier (Consultant) (ACT-MI).

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Disclaimer

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Conflicts of Interest

• None to report.
Poll Question #1

What is your primary role related to mental healthcare? (select all that apply)

- Consumer
- Student, Trainee, or Fellow
- Clinician
- Researcher
- Administrator, Manager, Policy Maker
Poll Question #2

Do you work within the Department of Veterans Affairs?

- Yes
- No
Poll Question #3

How familiar are you with Acceptance and Commitment Therapy?

- Never heard of it.
- I’ve heard of it.
- I’ve read about it.
- I’ve been trained in it.
- I use it.
Poll Question #4

How familiar are you with moral injury?

○ Never heard of it.
○ I’ve heard of it.
○ I’ve read about it.
○ I’ve treated it.
Poll Question #5

If you have treated moral injury, which treatments do you most often use (select all that apply)?

- Cognitive Processing Therapy
- Prolonged Exposure
- Adaptive Disclosure
- Impact of Killing
- Acceptance and Commitment Therapy for Moral Injury
Poll Question #6

*If you have used evidence based psychotherapies for PTSD (Prolonged Exposure, Cognitive Processing Therapy, or Eye Movement Desensitization and Reprocessing) to treat moral injury, how satisfied are you in general with the application of these interventions to moral injury treatment?*

- Completely dissatisfied
- Somewhat dissatisfied
- Neutral
- Somewhat satisfied
- Completely satisfied
Overview

1. Introduction to our group’s conceptual model of moral injury

2. Background on the relevance of moral injury to suicide prevention

3. Development of Acceptance and Commitment Therapy for Moral Injury (ACT-MI) treatment protocol and results of a case study demonstrating an application of ACT-MI in a Service Member experiencing concurrent suicidal ideation

4. Design of a grant-funded randomized controlled acceptability and feasibility pilot study for ACT-MI
Conceptual Model of Moral Injury
What keeps us connected?
Constructs Useful to the Proposed Definition of Moral Injury

Social Functionalism and Evolutionary Science (Farnsworth et al., 2014; Hayes & Sanford, 2014; Wilson, Hayes, Biglan, & Embry, 2014)

• Moral emotions serve **social purposes**. Humans are inherently tribal and moral emotions keep us inside of the tribe or remove us from the tribe if we have committed a violation. Not only do emotions communicate to us, emotions communicate to the group and allow social commitments.
• Moral emotions are coordinated responses critical to survival. They are the product of factors like variation, selection, and retention in context.

Functional Contextualism (Hayes, Wilson, & Strosahl, 2011)

• A philosophy of science wherein the goal is to **predict and influence** behavior in the most parsimonious manner. Within the contextual behavioral science community, behavior (overt and covert events) is predicted and influenced based on the environmental factors in which it emerges and the function it serves.

**Therefore, moral emotions serve individual and social functions AND are dependent on contextual factors in the environment**

• A model that accounts for the social functions of moral pain
Moral Injury Model

Morally Injurious Events

• “A situation occurring in a high-stakes environment where an individual perceives that an important moral has been violated by the actions of the self or others.”

Moral Pain

• “The experience of dysphoric moral emotions and cognitions in response to a morally injurious event.”

Moral Injury

• “Social, psychological and spiritual suffering stemming from costly or unworkable attempts to manage, control, or cope with the experience of moral pain.”

(Farnsworth, Drescher, Evans, & Walser, 2017)
Moral Injury Model

- I feel betrayed by leaders who I once trusted
- I did things in war that betrayed my personal values
- I saw/was involved in the deaths of children
- I am troubled by having witnessed others’ immoral acts
- There were times when I engaged in revenge/retribution for things that happened
- I violated my own morals by failing to do something I felt I should have done

Farnsworth et al., 2017
Moral Injury Model

Moral Injury

- Disconnection from relationships
- Discontinuing spiritual practice
- Disengaging from self-care
- Suicidal Ideation and Behavior
- Substance Use
- Workplace difficulties

Central Core:
- Shame
- Disgust
- Contempt
- Anger
- Guilt
- Self-blame thoughts
- Thoughts blaming others
- Stomach Flipping
- Urge to isolate
- I am a monster
- Humans are evil
- Tightness in chest

Farnsworth et al., 2017
Background on moral injury and the relevance of moral injury to suicide prevention
Why is moral injury relevant?

Prevalence of morally injurious events among warzone Veterans:

- 27% of soldiers endorsed facing dilemmas to which they were unsure of how to respond (MHAT-V, 2008b)
- 11% acknowledged engaging in morally transgressive events while deployed, 26% of Veterans reported transgressions by others, and 26% reported moral betrayal (Wisco et al., 2017)

Exposure to morally injurious events as a risk factor for:

- Substance use (Battles et al., 2018; Kelley et al., 2019)
- Depression (Currier et al., 2014)
- PTSD (Bryan et al., 2018; Maguen et al., 2010)
- Suicidal ideation and behavior (Bryan et al., 2018; Kelley et al., 2019)
Moral Injury and PTSD

- Moral injury can be conceptualized as a construct that is both related to and distinct from PTSD (Currier, McDermott, Farnsworth, & Borges, 2019; Bryan, Bryan, Roberge, Leifker, & Rozek, 2018; Sun et al., 2019).

- Relationship between betrayal-based potentially morally injurious events (PMIEs) and PTSD mediated by anger, marginal evidence supporting the relationship between perpetration-based PMIEs and PTSD mediated by guilt and shame (Jordan et al., 2017; Bryan et al., 2018).

- In a qualitative study, 12 of 14 Veterans who were recruited based on a lifetime history of moral injury (within a year of completing an EBP for PTSD) reported persistent difficulties in functioning related to moral injury after 8 or more sessions of Cognitive Processing Therapy (CPT) and/or Prolonged Exposure (PE) (Borges et al., in preparation).

- The vast majority of Veterans struggling with moral injury related issues receive treatment for PTSD. The efficacy of these interventions for moral injury is still unknown.

- EBP’s for PTSD are fantastic, but may not always sufficiently address moral injury related processes (Steenkamp et al., 2015).
Moral Injury and Suicidal Ideation and Behavior

- Twenty Veterans die by suicide each day.
- Exposure to morally injurious events (MIEs) is a risk factor for suicidal ideation and behavior in Service Members and Veterans. Interaction between PTSD and moral injury associated with increased risk for suicidal ideation and suicide attempts. (Bryan et al., 2018; Bryan et al., 2015).
- Self and other directed moral injury (Expressions of Moral Injury Scale) strongly associated with suicidal ideation, self-judgment strongly associated with suicidal ideation, relationship between self-directed moral injury and suicidal ideation was strengthened at higher levels of self-judgment (Kelley et al., 2019).
- Firing a weapon and killing in combat are associated with suicidal ideation in OEF/OIF Veterans (Tripp et al., 2016).
- Evidence based psychotherapies for PTSD may not sufficiently target the pathways maintaining suffering in moral injury, causing suicidal ideation and behavior to persist.
- Treatments are needed to target moral injury and co-occurring suicidal ideation and behavior.
Need for Evidence Based Psychotherapies Targeting the Pathways Maintaining Suffering in Moral Injury

Psychotherapies proposed for moral injury and related constructs

- Adaptive Disclosure (Gray et al., 2012; Litz et al., 2009)
- Impact of Killing (Maguen et al., 2017)
- Trauma Informed Guilt Reduction (Norman et al., 2014)
- Acceptance and Commitment Therapy for Moral Injury (Farnsworth*, Borges*, Drescher, & Walser, 2019; Borges, Under Review; Farnsworth et al., 2017)

While the literature suggests moral injury is a construct independent of PTSD, we often treat it clinically as a subset of PTSD

- Case studies using Prolonged Exposure and Cognitive Processing Therapy have been shown to treat difficulties associated with moral injury, but the efficacy of these interventions for treating moral injury is still unknown as RCT’s have not yet been published (Held et al., 2017; Paul et al., 2014; Wachen et al., 2016).
ACT-MI Treatment Protocol Development
## Existing barriers and needs for an intervention

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<th>Barrier</th>
<th>Need</th>
<th>ACT-MI as Solution</th>
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<td>Extant interventions may not adequately target moral emotions.</td>
<td>Theoretically grounded interventions that explicitly target moral emotions.</td>
<td>ACT-MI is based on social functional theory of moral emotions. Using experiential exercises, metaphors, and skills practice between sessions, ACT-MI capitalizes upon opportunities for learning.</td>
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<td>Several potential symptom pathways can lead to moral injury.</td>
<td>Moral injury specific, transdiagnostic interventions.</td>
<td>ACT-MI is a transdiagnostic intervention structured to address moral injury regardless of its etiology (e.g., suited to address moral betrayal or moral perpetration) or diagnoses with which it is associated (e.g., PTSD, substance use disorders, depression).</td>
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<td>Extant interventions focus primarily on symptom reduction rather than the need to foster recovery.</td>
<td>Recovery-oriented interventions that promote tolerance of moral emotions AND reintegration with relationships and the community.</td>
<td>ACT-MI directly targets functional recovery by assisting Veterans in identifying and engaging in value-consistent behaviors despite associated moral pain via aversive thoughts, emotions, sensations, and/or urges.</td>
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<td>Moral emotions are social in nature. Individual treatment modalities limit opportunities for social interaction.</td>
<td>Interventions that include opportunities for social interaction with peers.</td>
<td>ACT-MI is based on a social functional theory of moral emotions and is delivered in a group format to provide maximal opportunities for new social learning in the presence of both values and pain.</td>
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Phases of ACT-MI Manual Development

1. Development of a 6-session group in a PTSD-RRTP program at the Palo Alto VAMC.

2. Implementation of the group at the Denver VAMC in the PTSD outpatient clinic.

3. Further development and expansion of the group to 12-sessions. Piloted the ACT-MI group for 2-years in this format.

4. A randomized controlled acceptability and feasibility pilot study where we will complete 6 groups of 12-session ACT-MI and 6 groups of 12-session Present Centered Therapy (n = 72 participants in total). Manual revisions will take place after 2-group cohorts are completed per the grant.


*Both authors contributed equally to this treatment manual
Why ACT is a good fit for Moral Injury: ACT Core Processes

Open
Acceptance
Defusion
Self-as-Context
Present Moment
Aware
Values
Engaged
Committed Action

VA ACT Training Workshop, Walser
Why ACT is a good fit for Moral Injury: Moral Healing

(Farnsworth*, Borges*, Drescher & Walser, 2019)

*Both authors contributed equally to this manual
ACT-MI Case Study to Illustrate our Protocol Under Development
De-identified Case Description

- Service Member consented to using the below information in presentations and publication. Information is de-identified to protect confidentiality.
- Service Member deployed to Afghanistan from 2008-2009 as a human intelligence collector.
- Received treatment for PTSD via Cognitive Processing Therapy. In addition to a history of PTSD, he reported a history of depression, suicidal ideation and behavior, and experienced abuse as a child.
- Scored 66 out of 80-points on the Moral Injury Questionnaire-Military version (MIQ-M) indicating significant exposure to MIEs (required to befriend members of terrorist organizations and use intelligence collected to take the lives of men, women, children).
- Early 30’s, married with two young daughters, family still practicing religion (he does not identify with this religion any longer).
- Service Member’s friend attempted suicide midway through our course of treatment. Another friend died during the course of our work together.
- Goal for treatment to "take off the mask...it’s a lot easier to put on the mask than actually look at yourself and try to get better."
- Reported difficulties engaging with meaning in his life and feeling isolated.
Telehealth ACT-MI Session Content: De-Identified Case Study

• **Sessions 1 and 2**: values clarification and creative hopelessness
  - Related to values clarification his primary goal was to "reconcile my actions with my values."

• **Sessions 3 through 5**: contacting the present moment, limitations of controlling moral pain
  - In the tug of war: "I can see the sergeant but I can’t see me."
  Reported experiencing fear, disgust, horror, and comfort in this scenario. He noticed urges to become the sergeant or abandon the sergeant noting that in either scenario "part of me dies."

(Farnsworth*, Borges*, Drescher & Walser, 2019)
*Both authors contributed equally to this manual
Telehealth ACT-MI Session Content: De-Identified Case Study

- **Sessions 6 through 9:** observing and accepting moral pain and stories about himself
  - Formerly a ballroom dancer, generated the metaphor of "ballroom dancing with my moral pain" to practice approaching his pain and holding it lightly while moving towards his values.
  - Practiced observing stories related to his moral pain and identified the function of these stories "we develop stories to hide our pain from ourselves and others."
  - Started to engage in value of spirituality for the first time since childhood: "I get a sense of spiritual fulfilment through helping others."
  - "I don’t think the pain will ever go away and I’m not sure I want it to. I can mourn the losses I have experienced without lessening my own worth."

- **Sessions 10 through 12:** holding pain/stories about myself and others lightly for the sake of my values
  - Tug of war self-compassion exercise: In observing himself in the tug of war, the service member said "my heart is breaking...my body wants to shut down...you have to accept who you are which includes who you have been."

(Farnsworth*, Borges*, Drescher & Walser, 2019)
*Both authors contributed equally to this manual
Telehealth ACT-MI Session Content: De-identified Case Study

• **Weekly experiential exercises in-session** mapping onto the skill practiced that week and ACT processes in general.

• **Weekly bold moves** to practice engaging flexibly with values in the presence of pain.
  - Engaged in values related to family relationships, physical self-care, and learning early in treatment. Began engaging in values of spirituality (e.g., learning that contributing to others connects him to a larger purpose) and emotional self-care (e.g., creating a work space for himself, purchasing luthier equipment, and registering a small guitar business) during the last half of treatment.

• **Additional weekly skills practice** related to content practiced in session that week (e.g., observing facets of moral pain).

• **Reviewed safety plan** together in session and updated with ACT-MI consistent skills (in particular identifying more specific warning signs, coping skills, and ways to make his environment safe that were consistent with treatment goals).

• Service Member’s wife participated in **post-treatment feedback session**.

• Service Member’s **Vet Center provider** followed-up our course of care by encouraging him to continue engaging in bold moves practice to facilitate generalization of skills.

(Farnsworth*, Borges*, Drescher & Walser, 2019)
*Both authors contributed equally to this manual*
## Telehealth ACT-MI Session Content: Bold Moves Tracking

### Values and moral pain as two sides of the same coin

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<th>Day</th>
<th>Which Bold Moves did you practice on this day?</th>
<th>What values were they connected to?</th>
<th>What did you notice before, during or after your Bold Move? (thoughts, emotions, sensations, urges, behaviors)</th>
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*(Farnsworth*, Borges*, Drescher & Walser, 2019)*

*Both authors contributed equally to this manual*
Values Related Results: Valued Living Questionnaire (VLQ) and Narrative Evaluation of Intervention Interview (NEII)

“I want to be able to thrive both for myself and for the sake of those around me...I want to be able to feel. To identify what I feel and interact with it. Moving forward I want my life to have purpose and meaning. I want to connect to my values of family and spirituality...To be there for my wife, my children, and for me... to recognize that regardless of what’s happened I still have value.”

“I think the biggest thing I did during the intervention that helped was trying to accept the fact that I can value something without living up to that value...that it’s more about moving in the right direction than it is about being or not being any particular thing.”

**VLQ SCORES ACROSS TREATMENT**

- Importance
- Behavior
- Composite
Experiential Willingness Related Results: Acceptance and Action Questionnaire-II (AAQ-II), Cognitive Fusion Questionnaire for Moral Injury (CFQ-MI), and NEII

“With the focus of this intervention being acceptance of moral pain, it helped me to make peace with the fact that I will feel moral pain based on my moral injuries and that is ok. It’s a good thing to feel pain and mourn loss of life...that does not make me weak or less human or anything else. It means that I am human...that I am able to feel.”

“The intervention did not lessen the amount of pain that I feel. It did not make it so that I no longer feel pain for my morally injurious events...What it did...it made it so that I could connect better with that pain...so I could interact with that pain with more responsibility...and it helped me to identify with areas that I connect to and be able to accept that in my life I will always feel a lot of moral pain and I am still able to feel happiness and feel connected to other people.”

AAQ-II Scores Across Treatment

CFQ-MI Scores Across Treatment
Discussion and Implications for Case Study

• Results of the case study suggest that ACT-MI is acceptable (NEII and Client Satisfaction Questionnaire-8 = 31/32 points) in a telehealth format for a Service Member struggling with difficulties in functioning related to moral injury (Borges, Under Review).

• The service member was able to engage in valued behavior that was critical for his recovery only when he was willing to approach his moral pain (once he started approaching intense guilt and shame in the presence of self-care and spirituality).

• Throughout treatment, the Service Member became less stuck inside of the content of his suicidal thoughts and plans.

• Suicide risk assessment required the therapist’s willingness to accept greater discomfort as the client was not physically in her presence.

• Future studies are needed to understand the efficacy of using ACT-MI to target co-occurring moral injury and suicidal behavior.
Discussion and Implications for Case Study

- After completing ACT-MI, the Service Member compared ACT-MI to previous treatment targeting his morally injurious events on the NEII. He said:

  “The biggest difference between ACT-MI and CPT is that ACT is focused specifically on the idea that I need to accept what has happened and not so much try to reassign blame for it. With many other treatment modalities it has focused on aiding victims and survivors to reassign blame and guilt for what they had been through—in my situation I had been unable to do so because the facts of the matter are that I bear full responsibility for the deaths of many people. This treatment was very effective in helping me to develop my values so that I can feel pain without being consumed by it and also focus on striving towards living up to my values and accepting where I am now instead of comparing myself to where I was or where I want to be.”
Next Steps: Pilot Randomized Controlled Acceptability and Feasibility Study!
Pilot Study Aims

1. **Determine the acceptability of ACT-MI and PCT for 72 Veterans endorsing impairment in functioning associated with moral injury.**
   - Satisfaction reported on a validated measure of client satisfaction (≥ 70% of participants with ≥ 24 Client Satisfaction Questionnaire score)

2. **Determine the feasibility of the efficacy study design and research procedures.**
   - Participant recruitment rates (≥ 50% of participants eligible and ≥ 30% willing to participate in proposed time frame); fidelity to treatment (≤ 15% of deviations to treatment fidelity), participant completion of the intervention (≤ 70% treatment drop-out), participant completion of study procedures (≤ 30% of participants lost to follow-up).

3. **Evaluate candidate measures of functional outcomes, ACT related processes, and symptoms of psychopathology immediately following treatment and at one-month and three-months post ACT-MI and PCT.**
   - Descriptive statistics including estimates of variability for candidate outcomes at baseline, post-treatment, one-month, and three-month follow-up assessments.
Pilot Study Design

**Inclusion**
- Eligible for VHA care
- Age 18-89
- Has deployed to a warzone
- Has experienced a morally injurious event and continues to experience functional impairment
- Willing to be randomized to either of the two conditions (ACT-MI or PCT).

**Exclusion**
- Inability to provide informed consent
- Inability to complete study measures due to acute intoxication/withdrawal symptoms, mania, psychosis, aggression, catatonia, cognitive impairment, etc.
- Imminent suicide risk
- Membership in a vulnerable population
- History of significant violence towards VA staff
- Participation in another interventional study
References


*Both authors contributed equally to this manual.*


References

Thank you!

Please contact Lauren.Borges2@va.gov for additional questions

Because we are still developing ACT-MI through our acceptability and feasibility study, a copy of the manual is not yet available for dissemination.