

AWARD NUMBER: W81XWH-19-2-0001

TITLE: *Patterns of Alcohol Use and Suicide-related Thoughts Among Recently-Discharged Veterans: Risk Factors Associated with the Military-to-Veteran Transition*

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CONTRACTING ORGANIZATION: CORNELL UNIVERSITY

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14. ABSTRACT The combination of alcohol use and negative emotional states has been identified as a particularly toxic combination for suicide risk. The current study proposes to examine changes in (a) alcohol use/misuse and (b) depression (as the primary suicide-related negative emotional state) as soldiers undergo the transition from active duty to veteran status, as well as to prevent/reduce alcohol misuse and depression in this population. To date: the assessments (screening, baseline, pre-separation (delivered up to 2 times) and postseparation (delivered 12 times) are nearing finalization; the internet-delivered brief intervention component (delivered 3 times to a portion of the participants in the study) is also nearing completion.					
15. SUBJECT TERMS Suicide; Veteran; Soldier; Negative Emotional States; Depression; Transition; Risk Factors; PTSD; Alcohol Use/Misuse; Drug Use/Misuse					
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TABLE OF CONTENTS

	<u>Page</u>
1. Introduction	4
2. Keywords	4
3. Accomplishments	5
4. Impact	7
5. Changes/Problems	9
6. Products	12
7. Participants & Other Collaborating Organizations	14
8. Special Reporting Requirements	15
9. Appendices	15

1. INTRODUCTION:

The combination of alcohol use and negative emotional states has been identified as a particularly toxic combination for suicide risk. The current study proposes to examine changes in (a) alcohol use/misuse and (b) depression (as the primary suicide-related negative emotional state) as soldiers undergo the transition from active duty to veteran status, as well as to prevent/reduce alcohol misuse and depression in this population. The proposed study has 3 objectives: (1) To empirically quantify the form of changes that occur with respect to alcohol use and depression over the transition; (2) To identify stable individual risk factors (e.g., personality, military experiences) and dynamic risk factors (e.g., changes in stressors and normative contexts over time) that may be associated with differential temporal patterns of suicide-related behavior (i.e., alcohol use/misuse) and cognition (i.e., depression); (3) To determine whether a simple, internet-delivered brief intervention (IDBI) shown to have efficacy in another high-risk population for alcohol misuse (college students transitioning to work) can be applied to soldiers transitioning out of the Army.

2. KEYWORDS: *Provide a brief list of keywords (limit to 20 words).*

Suicide; Veteran; Soldier; Negative Emotional States; Depression; Transition; Risk Factors; PTSD; Alcohol Use/Misuse; Drug Use/Misuse

3. ACCOMPLISHMENTS:

What were the major goals of the project?

1. IRB Review from individual universities and USAMRMC Office of Research Protection.
 - A. Pretest IRB review: 100% complete
 - B. Main study IRB review:
 - i. Program Development IRB review: 100% (no human subjects)
 - ii. IRB review for the completed study protocol from Cornell University: Submitted (100%)
 - iii. AHRPO review for the completed protocol: (100%)
2. Protocol development
 - A. Pretest: 100%
 - B. Main study:
 - i. Invitation/screener/baseline assessments: 100%
 - ii. Pre- and post-discharge assessments: 100%
 - iii. Programming/coding of assessments: 100%
 - iv. Pretest main study protocol: 100%
3. Internet-based intervention modules
 - A. Development for Main study: 100%
 - i. Content development for modules 100%
 - ii. UX design and testing: 100%
 - iii. Front-end development: 100%
 - vi. Backend integration and QA testing: 100%
4. Active study enrollment/study launch
 - A. 80 participants recruited through Prolific.au: Pretest: 100%
 - B. 450 study population (final); Recruitment target is 1350 (Baseline).

Accomplishments (Continued)

As of 02/28/2023:

Activity	Number
Complete Recruitment Form	2468
Eligible for screener after completing Recruitment Form	2166
Eligible for study/Screener completed	1242
Baseline completed (Eligible only)	880
Pre-separation 1 completed	660
Post-separation 1 completed	576
Post-separation 2 completed	512
Post-separation 3 completed	434
Post-separation 4 completed	401
Post-separation 5 completed	395
Post-separation 6 completed	392
Post-separation 7 completed	372
Post-separation 8 completed	336
Post-separation 9 completed	279
Post-separation 10 completed	247
Post-separation 11 completed	184
Post separation 12 completed	157

Recruitment Table is appended to this report.

Intervention deployment (*updated to reflect current enrollment*): *Post-1=89%; Post-4=61%; Post-7=57%*

5. Data collection closeout: Year 5. 0% complete
6. Data collection cleanup, data analysis, drafting of project findings: 0%

What was accomplished under these goals?

Major activities

1. IRB Program approval. Throughout the course of the study development, we had to make changes in the study design that required amendment requests to IRB.
2. Finalize coding of all phases of the assessments.
3. Finalize coding the intervention.
4. Finalize testing of the compatibility of the systems.
5. Begin/sustain in-person recruitment at the Hawk Center at JBLM.
6. Begin enrolling participants into the study.
7. Register completes for Screener/Baseline/Pre-separation/Post-separation Assessments.
8. Deploy the Intervention (where applicable).
9. Request and receive No-Cost Extension to continue data collection during Year 5.

What opportunities for training and professional development has the project provided?

Nothing to report.

What do you plan to do during the next reporting period to accomplish the goals?

At the conclusion of Year 5:

1. We will have recruitment finalized by April 30, 2023.
2. We will have run analysis of the data collected at various points in time in Year 5.
3. We will continue distributing the Pre/Post-separation assessments monthly until payment funds are exhausted.
4. We will continue deploying the Intervention to the randomized sample of participants and following up with phone calls by a clinical psychologist when necessary.
5. The assessment / intervention pieces will be synced to close in tandem.

IMPACT:

What was the impact on the development of the principal discipline(s) of the project?

Nothing to report.

What was the impact on other disciplines?

Nothing to report.

What was the impact on technology transfer?

Nothing to report.

What was the impact on society beyond science and technology?

Nothing to report.

5. CHANGES/PROBLEMS:

Nothing to report.

Actual or anticipated problems or delays and actions or plans to resolve them

In April, 2023 we will suspend our recruiting/tabling activities at the Hawk Center.

Having the no-cost extension will help us reach our goal of having 450 veterans in the final sample. As mentioned in other reports, Covid protocols delayed our recruitment efforts, but we have been able to recover.

Changes that had a significant impact on expenditures

Nothing to report.

Significant changes in use or care of human subjects, vertebrate animals, biohazards, and/or select agents

Significant changes in use or care of human subjects

Nothing to report.

Significant changes in use or care of vertebrate animals

Nothing to report.

Significant changes in use of biohazards and/or select agents

Nothing to report.

6. PRODUCTS:

- **Publications, conference papers, and presentations**
Journal publications.

Nothing to report.

Books or other non-periodical, one-time publications.

Nothing to report.

Other publications, conference papers and presentations.

Nothing to report.

- **Website(s) or other Internet site(s)**

Nothing to report.

- **Technologies or techniques**

The intervention technology will be shared with DoD at the conclusion of the study.

- **Inventions, patent applications, and/or licenses**

Nothing to report.

- **Other Products**

Nothing to report.

7. PARTICIPANTS & OTHER COLLABORATING ORGANIZATIONS

What individuals have worked on the project?

Samuel B. Bacharach	NO CHANGE
Peter Bamberger	NO CHANGE
Paul Bliese	NO CHANGE
Mary Larimer	NO CHANGE
Brittney Hultgren	NO CHANGE
Jennifer Cadigan	NO CHANGE
Annelise Smith	4 CM
Yuhsiang Tse	4 CM

Has there been a change in the active other support of the PD/PI(s) or senior/key personnel since the last reporting period?

Nothing to report.

What other organizations were involved as partners?

Nothing to report.

8. SPECIAL REPORTING REQUIREMENTS

COLLABORATIVE AWARDS: *NA*

QUAD CHARTS: *Attached*

9. APPENDICES: *Recruitment Enrollment Table*

Patterns of Alcohol Use and Suicide-related Thoughts of Recently Discharged Veterans: Risk Factors Associated with Military-to-Veteran Transition

#BA160401

W81XWH1920001

PI: Samuel B. Bacharach

Org: Cornell University

Award Amount: \$1,498,264

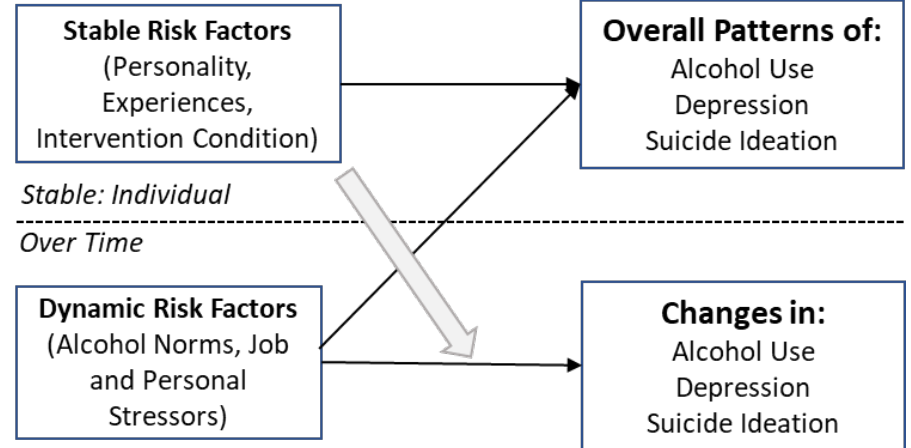


Study/Product Aim(s)

- Examine patterns of change over 15 months in alcohol use/misuse, depression, and suicide ideation as Service Members transition from active duty to veteran status
- Identify stable (personality, military experiences) and dynamic (changes in personal stressors) risk factors
- Determine whether personalized interventions shown to be efficacious with college students are effective with transitioning Service Members

Approach

Assess Service Members up to three times pre-discharge and monthly post-discharge (12x). Assess outcomes and relevant risk factors monthly. Test efficacy of two personalized internet/smartphone interventions using randomized trial with control.



Selection of specific predictors and individual difference and employment factors guided by this model.

Timeline and Cost

Activities	CY	19	20	21	22
Design/develop/program assessments/interventions		█			
Enroll study population (Final N=450)/begin data collection				█	
Finalize data collection/start analysis				█	█
Transfer software files to DOD					█
Estimated Budget (\$K)		\$350	\$400	\$450	\$300

Goals/Milestones

- CY19 Goal** – Design/develop/program assessments and interventions
- CY20 Goal** – Initiate and continue data collection
- CY21 Goal** – Continue data collection; conduct preliminary analysis
- CY22 Goal (amended)** – Continue data collection; conduct preliminary analysis.
- CY23 Goal (new)** – Finish data collection; finalize analysis; transfer software files to DoD.

Comments/Challenges/Issues/Concerns

- Post-separation survey completion rates behind projections due to lag in recruitment.
- Was granted a No-Cost Extension to February 28, 2024

Budget Expenditure to Date

Projected Expenditure: \$1,498,264

Actual Expenditure: \$1,203,362

Note: All subcontractor billing for Year 4, Quarter 4 is not in place.

No-Cost Extension granted to Feb 28, 2024.

Updated: March 28, 2023

THE NETWORK STUDY PROGRESS CHART

Recruitment Progress as of 2/28/2023

