

**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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# REPORT DOCUMENTATION PAGE

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<b>15. SUBJECT TERMS</b> Suicide; Veteran; Soldier; Negative Emotional States; Depression; Transition; Risk Factors; PTSD; Alcohol Use/Misuse; Drug Use/Misuse				
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## **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:**

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 entire completed protocol: 0%
2. Protocol development
  - A. Pretest: 100%
  - B. Main study:
    - i. Invitation/screener/baseline assessments: 97%
    - ii. Pre- and post-discharge assessments: 97%
    - iii. Programming/coding of assessments: 0%
    - iv. Review/pretest all protocols by SMEs: 0%
3. Internet-based intervention modules
  - A. Development for Main study: 85%
4. Active study enrollment/study launch
  - A. 80 participants recruited through Prolific.au: Pretest: 100%
  - B. 450 study population: Main study: 0%
5. Intervention deployment: 0%
6. Data collection end: Early Year 4. 0% complete.
7. Data collection cleanup, data analysis, drafting of project findings: 0%

## **What was accomplished under these goals?**

Major activities:

### **1. IRB Program Approval.**

PI: Samuel Bacharach, Cornell University

Partnering PI: Paul Bliese, University of South Carolina

Program Development approval was granted by Cornell IRB on has been extended to June 6, 2020. Additional IRB approval was granted for the pretest by the University of South Carolina on September 5, 2019, Cornell University on October 14, 2019, and by AHRPO on November 14, 2019

### **2. Protocol/Assessment development.**

PI: Samuel Bacharach, Cornell University

Partnering PI: Paul Bliese, University of South Carolina

Partnering PI Mary Larimer, University of Washington

The participant interaction with the study can take up to approximately 18 months, from initial contact, screening assessment, baseline assessment, pre-separation assessment (up to 2x), and post-separation assessment (12x). Each delivery of the assessments need to be aligned with the aims of the study but also to coordinate with the internet-delivered brief intervention. Protocol/Assessment development has taken place over a number of months, and sometimes with in-person team meetings and site visits to JBLM.

### **3. Intervention development.**

Partnering PI: Mary Larimer, University of Washington

Three times post-separation a portion of the participants will be invited to interact with a personalized internet-delivered intervention that will use some of the material gathered in the assessments to offer suggestions on making better or less-risky choices. Rapid prototyping was conducted with selected Subject Matter Experts in February 2020.

### **4. Pretest.**

Partnering PI: Paul Bliese, University of South Carolina

In November-December 2019 using a sample of military veterans found through an online survey provider, a number of proposed measures were tested for potential use in the study.

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

Nothing to report.

**How were the results disseminated to communities of interest?**

Nothing to report.

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

At the conclusion of Year 2, we expect that all necessary IRB approvals will be secured; that the registry for Clinicaltrials.gov will be in place; that data collection/intervention deployment will be underway.

#### **4. 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:**

### **Changes in approach and reasons for change**

During Year 1, there was a small slowdown with IRB approval for the Pretest, but that problem was resolved.

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

The COVID-19 situation has made it necessary to postpone scheduled relevant meetings with Subject Matter Experts to review and give feedback on the intervention material. Individual universities have imposed travel restrictions and there is a degree of administrative slowdown as the study moves through this period. Programming of the protocol and intervention has been delayed due to shelter-in-place regulations in Washington and New York.

### **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 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**

Nothing to report.

- **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

**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:** Partnering PIs have been asked to submit a duplicative report.

**QUAD CHARTS:** See attached

## **9. APPENDICES: NA**



# Patterns of Alcohol Use and Suicide-related Thoughts of Recently Discharged Veterans: Risk

## Factors Associated with Military-to-Veteran Transition

#BA160401 and Task Title Here

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.

Stable Risk Factors  
(Personality,  
Experiences,  
Intervention Condition)

Stable: Individual  
Over Time

Dynamic Risk Factors  
(Alcohol Norms, Job  
and Personal  
Stressors)

Overall Patterns of:  
Alcohol Use  
Depression  
Suicide Ideation

Changes in:  
Alcohol Use  
Depression  
Suicide Ideation

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 (N=450)/begin data collection					
Finalize data collection/start analysis					
Transfer software files to DOD					
<b>Estimated Budget (\$K)</b>	\$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** – Finish data collection; finalize analysis; transfer software files to DOD

### Comments/Challenges/Issues/Concerns

- There is some expected project slowdown due to COVID-19.

### Budget Expenditure to Date

Projected Expenditure: \$349,939

Actual Expenditure: \$168,797