

AWARD NUMBER: W81XWH-18-1-0235

TITLE: Psychological Health and Resilience through Values Affirmation: Effectiveness of a Brief Intervention among Military Personnel

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CONTRACTING ORGANIZATION: Northern Arizona University
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REPORT DATE: July 2019

TYPE OF REPORT: Annual

PREPARED FOR: U.S. Army Medical Research and Materiel Command
Fort Detrick, Maryland 21702-5012

DISTRIBUTION STATEMENT: Approved for Public Release;
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REPORT DOCUMENTATION PAGE			<i>Form Approved</i> <i>OMB No. 0704-0188</i>		
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1. REPORT DATE July 2019		2. REPORT TYPE Annual		3. DATES COVERED July 1, 2018-June 30, 2019	
4. TITLE AND SUBTITLE Psychological Health and Resilience through Values Affirmation: Effectiveness of a Brief Intervention among Military Personnel			5a. CONTRACT NUMBER		
			5b. GRANT NUMBER W81XWH-18-1-0235		
			5c. PROGRAM ELEMENT NUMBER		
6. AUTHOR(S) Ann H. Huffman, Ph.D., & Heidi A. Wayment E-Mail: ann.huffman@nau.edu			5d. PROJECT NUMBER		
			5e. TASK NUMBER		
			5f. WORK UNIT NUMBER		
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) NORTHERN ARIZONA UNIVERSITY OFFICE OF GRANTS AND CONT. 601 S KNOLES DR ROOM 220 FLAGSTAFF AZ 86011-7034			8. PERFORMING ORGANIZATION REPORT NUMBER		
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES) U.S. Army Medical Research and Materiel Command Fort Detrick, Maryland 21702-5012			10. SPONSOR/MONITOR'S ACRONYM(S)		
			11. SPONSOR/MONITOR'S REPORT NUMBER(S)		
12. DISTRIBUTION / AVAILABILITY STATEMENT Approved for Public Release; Distribution Unlimited					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT The long-range goal for this project is to improve the quality of life for military personnel. The objective of this proposal which supports the long-range goal of this project is to examine the effectiveness of a simple, non-spiritual, self-management strategy that strengthens personal and occupational resources-resources that can positively impact adverse reactions to military-specific demands and promote personal and work outcomes. Our intervention, designed to strengthen a balanced self-identity through very brief affirmations of growth and balance values, will be adapted to military occupational contexts. Within the context of Adler and Castro's (2013) Occupational Health Model for Military Mental Health, our central hypothesis is that a balanced self-identity will strengthen personal and occupational resources that moderate the relationship between demands and personal and work outcomes. In the first year we have developed the content for the app, and are preparing to conduct beta testing and piloting.					
15. SUBJECT TERMS Military, wellbeing, intervention, balanced self-identity, app					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT	b. ABSTRACT	c. THIS PAGE			USAMRMC
Unclassified	Unclassified	Unclassified	Unclassified	12	19b. TELEPHONE NUMBER (include area code)

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1. **INTRODUCTION:** *Narrative that briefly (one paragraph) describes the subject, purpose and scope of the research.*

The long-range goal for this project is to improve the quality of life for military personnel. The objective of this proposal which supports the long-range goal of this project is to examine the effectiveness of a simple, non-spiritual, self-management strategy that strengthens personal and occupational resources-resources that can positively impact adverse reactions to military-specific demands and promote personal and work outcomes. Our intervention, designed to strengthen a balanced self-identity through very brief affirmations of growth and balance values, will be adapted to military occupational contexts. Within the context of Adler and Castro's (2013) Occupational Health Model for Military Mental Health, our central hypothesis is that a balanced self-identity will strengthen personal and occupational resources that moderate the relationship between demands and personal and work outcomes.

2. **KEYWORDS:**

Military, wellbeing, quiet ego, intervention, growth, self-identity, balance, app,

3. **ACCOMPLISHMENTS:**

What were the major goals of the project?

	Timeline (months)	% Completed
Major Task 1: Research Team/Lab Setup	1-4	
Subtask 1: Assemble research team - completed	1-4	100%
Subtask 2: Set up lab - completed	1-4	100%
Subtask 1: Finalize Balanced Resources and Values Exploration (BRAVE) intervention materials - initial material completed	3-4	100%
Subtask 2: Develop Focus Group Protocol - Protocol developed	2-3	100%
Subtask 3: Finalize data collection Protocol - First draft completed; changes will be made based on specifics of sample	3-4	80%
Subtask 4: Secure Institutional Review Board (IRB)/Human Research Protection Office (HRPO) Approval - All three IRB have been approved by NAU (although final application pending based on HRPO's approval)/ two have been approved by HRPO, and one is pending with HRPO	2-6	80%
Purchase of Gift cards - We have purchased the cards for the focus groups; will purchase the remaining gift cards closer to the data collections.	3-9	50%
Major Task 2: Recruitment for focus groups/beta app testers	6-9	

Subtask 1: Recruit participants (n = 12; active duty or veteran) for focus groups - Recruitment (and focus groups) completed	6-9	100%
Subtask 2: Schedule focus group - Scheduling (and focus groups) completed	6-9	100%
Subtask 3: Recruit beta testers (n = 12; (ROTC students, reservists, veterans) for initial app testing - We have conducted some usability testing	6-9	50%
Subtask 4: Conduct focus groups to discuss BRAVE materials - completed	6-9	100%
Subtask 5: Adapt BRAVE materials based on focus group results - completed	7-9	100%
Major Task 3: Smartphone application Q-Core 1.0 alpha development	1-9	
Subtask 1: Develop basic story board for Q-Core app - Story board is developed with some minor future revisions	1-2	80%
Subtask 2: Initial alpha version Q-Core 1.0 app developed - In process	3-6	50%
Subtask 3: Alpha testers work with Q-Core 1.0 app alpha iterations; provide feedback. - Will be beginning soon	7-9	0%
Subtask 4: Revise alpha version Q-Core 1.0 app to reach 1.0 beta status based on group and alpha tester feedback - Will be beginning soon	7-9	0%
Major Task 4: Pilot Intervention Study	10-15	
Subtask 1: Recruit participants (active duty) for pilot study (n = 8) - Been in contact with leadership at Fort Hood/ have support/ once dates are confirmed will finalize sample	10-12	50%
Major Task 5: Preparation for Intervention Study	10-15	
Subtask 1: Recruit participants (active duty) for experimental studies - Once HRPO is approved – will recruit	10-11	50%
Subtask 2: Facilities, materials, protocols complete; students trained - In progress	10-15	50%
Major Task 6: Beta testing of Q-Core 1.0	10-13	
Subtask 1: Beta testers 1-6 work with Beta version 1.0 testing and feedback; feedback face-to-face / online - Will begin soon	10-13	0%
Subtask 2: Improve beta implementation of Q-Core 1.0 app and Revise Q-Core 1.1 Feature Set Draft Specification based on focus group feedback to Q-Core 1.0 beta versions - Based on subtask 1	10-13	0%
Subtask 3: Beta testers 7-12 make final review; online / face-to-face feedback - Based on subtask 1, 2	10-13	0%

What was accomplished under these goals?

During the first year of the project we put together our research team and lab. This included hiring personnel (research coordinator, research assistants), creating offices and labs. We completed focus groups and usability testing. We developed the content for the app, and have begun the development of the app. We have submitted all of our initial IRB/HRPO documents for the study.

We have not started the pilot, or larger data collection so we do not have any significant results or key outcomes.

We have not started the beta testing, but we should have this process started within the next 6 weeks.

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?

During our next reporting period of the project we will be finalizing the app, conducting beta testing, and then begin the process for the larger data collection (e.g., recruitment, data collection). Our goal is to purchase equipment. Additionally, we will be conducting bio training with consultant for collecting, aliquoting, freezing and shipping urine samples. We will be conducting the first data collection, and then as necessary, revise materials. Once they are finalized we will conduct the second data collection.

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

Nothing to Report.

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

Currently a few of our tasks are behind the originally prescribed schedule. They are close to being completed, and therefore we do not see any additional delays associated with these tasks.

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.**

Not applicable

- **Significant changes in use of biohazards and/or select agents**

Not applicable

6. PRODUCTS:

Publications, conference papers, and presentations

Nothing to Report.

Journal publications.

Nothing to Report.

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

Nothing to Report.

Other publications, conference papers, and presentations.

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?**

Name: Ann Huffman, Ph.D.
Project Role: Co-PI
Researcher Identifier (e.g. ORCID ID): <https://orcid.org/0000-0002-7434-571X>
Nearest person month worked: 5 months
Contribution to Project: Dr. Huffman has performed work in the area of app content development, contacts for recruitment, HRPO paperwork, development of interview protocols, supervision of research coordinator and Research Assistant,

Name: Heidi Wayment, Ph.D.
Project Role: Co-PI
Researcher Identifier (e.g. ORCID ID): <https://orcid.org/0000-0001-5287-5966>
Nearest person month worked: 5 months
Contribution to Project: Dr. Wayment has performed work in the area of app content development, app organization and management, NAU IRB paperwork, development of initial protocols, liaison with App developer

Name: Christopher Farkas
Project Role: Research Coordinator
Researcher Identifier (e.g. ORCID ID): NA
Nearest person month worked: 10 months
Contribution to Project: Christopher has performed work in the area of support in app content, development of recordings for app, IRB-related training, purchasing (e.g., gift cards), support in support for daily operations.

Name: Jennifer Van Horne
Project Role: Research Assistant
Researcher Identifier (e.g. ORCID ID): NA
Nearest person month worked: 1.5 months
Contribution to Project: Jennifer has worked on survey development, literature reviews, support to research coordinator.

Name: Anthony Santos
Project Role: Research Assistant
Researcher Identifier (e.g. ORCID ID): NA
Nearest person month worked: 9 months (20 hours week)
Contribution to Project: Anthony worked on literature reviews, app content, survey development, and general support to research coordinator

Name: Carl Castro
Project Role: Military Consultant
Researcher Identifier (e.g. ORCID ID): NA
Nearest person month worked: 1 month
Contribution to Project: Carl assisted in integrating military concepts to intervention material; supported PIs as needed

Name: JP Bonn
Project Role: App Developer Consultant
Researcher Identifier (e.g. ORCID ID): NA
Nearest person month worked: 3 month
Contribution to Project: JP has been working on app development.

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:**

Not applicable

- **QUAD CHARTS:**

Quad chart attached.

9. APPENDICES

Psychological Health and Resilience through Values Affirmation: Effectiveness of a Brief Intervention among Military Personnel



BA150565
W81XWH-18-1-0235

PI: Huffman/Wayment

Org: Northern Arizona University Award Amount: 1,410,601

Study/Product Aim(s)

- Aim 1. Examine the effectiveness of a brief, non-spiritual, self-management intervention on strengthening value balance.
- Aim 2. Assess which factors moderate the relationship between the self-management intervention and organizational/personal resources.
- Aim 3. Investigate the impact of improved value balance on resources, and work and personal outcomes.

Approach

In a three-phased study, we will experimentally examine how well our adaptation of an intervention strengthens personal and occupational resources in a military occupational setting. Phase I and II consist of refinement of intervention, focus group and beta testing of phone app (Q-Core 1.0). In phase III two studies (pre-test post-test control group design) will be implemented.

Our app-based intervention to strengthen a balanced self-identity overcomes past issues with stigma associated with traditional medical models by focusing on self-reliance and personal growth. Figure 1 provides an example of what our App might look like when completed.

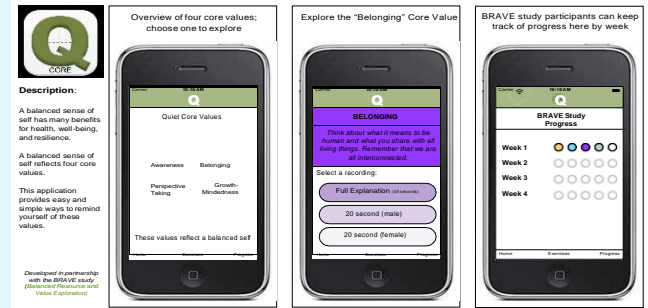


Figure 1

Accomplishment: At this point in time (6 months into grant) we have no science-related accomplishments to report.

Timeline and Cost

Activities	CY	18-19	19-20	20
Develop/Pilot Self-Management Intervention		Starts in 18-19, ends in 19-20		
Examination of Effectiveness of Self-Management Intervention		Starts in 19-20, ends in 20		
Assess impact of Intervention and key moderating variables			Starts in 19-20, ends in 20	
Estimated Budget (\$K)		\$562,851	\$688,906	\$158,842

Updated: (July 31, 2019)

Goals/Milestones

- CY18 Goal** – Develop/Pilot Self-Management Intervention
 - X Full working lab
 - X 75% of all IRB/HRPO application approved
 - X Focus groups & BRAVE Protocols completed
- CY19 Goals** – Examination of Effectiveness of Self-Management Intervention
 - Recruitment plan developed
 - In progress for developing final materials
- CY20 Goal** – Assess impact of Intervention and key moderating variables

Comments/Challenges/Issues/Concerns

Challenge: Currently no major concerns

Budget Expenditure to Date

Projected Expenditure: \$586,200
Actual Expenditure: \$289,193