

AWARD NUMBER: W81XWH-18-1-0235

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

PRINCIPAL INVESTIGATOR: Ann H. Huffman, Ph.D.

CONTRACTING ORGANIZATION: Northern Arizona University

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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. The study was paused by the covid pandemic, and we are now focusing on an online version of the study.					
15. SUBJECT TERMS Military, wellbeing, intervention, balanced self-identity, app					
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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?

Phase II		
Aim 1: Examine the effectiveness of a brief, non-spiritual, self-management intervention on strengthening value balance.		
	Timeline	% complete
Major Task 4: Pilot Intervention Study	10-15	100%
<i>YEAR 1 Milestone: BRAVE Intervention Materials Developed</i>	MONTH 14	
Major Task 5: Preparation for Intervention Study	10-15	100%
<i>YEAR 2 Milestone: Setting and Materials for Intervention Study Ready</i>	MONTH 15	
Major Task 6: Beta testing of Direction Check (renamed) 1.0	10-13	100%
<i>YEAR 2 Milestone: Q-core 1.0 tested and ready for submission</i>	MONTH 13	
Major Task 7: Direction Check 1.0 prepare application	10-15	100%
<i>YEAR 2 Milestone: Q-core 1.0 submitted to Apple</i>	MONTH 15	

Phase III: UPDATED TIMELINES WITH NO COST EXTENSION		
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.		
	Timeline	

Major Task 8: Conduct BRAVE Intervention Studies (active duty, N = 200);	Nov 2022	10%
<i>YEAR 2 Milestone: Studies 1 & 2 completed; Data ready for analysis</i>	Nov 2022	
Major Task 9: Data Analysis		NA
<i>YEAR 2: Milestone: Data analyzed</i>	Feb 2023	
Major Task 10: Finalize Direction Check 1.1 (if necessary)	Feb 2023	NA
<i>YEAR 2 Milestone: Beta version Q-Core 1.1 developed</i>	Mar 2023	
Major Task 11: Beta testing of Direction Check 1.1 (if necessary)	Mar 2023	NA
Major Task 12: Final Version of Direction Check prepare application for submission	May 2023	NA
<i>YEAR 2 Milestone: Direction Check App tested and ready for submission</i>	May 2023	NA
<i>YEAR 2 Milestone: Direction Check App submitted to Apple</i>	June 2023	NA

What was accomplished under these goals?

We actively started our online data collection. To reach this milestone, we accomplished several of the important processes such as adapting our study materials, advertising materials, and several editions of paperwork needed for NAU and DOD IRB approval. We have been reaching out to military organizations. We continue to update the app as needed. We have added several lab members – to include one veteran and one national guard member – and two research assistants. Administratively, we have submitted our continuation IRB paperwork, and also a one year no cost extension.

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

Nothing to Report.

How were the results disseminated to communities of interest?

Initial results related to changes in work-family experiences were presented at the American Psychological Association 2022.

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

Our goal is to complete the online study during this time period. We continue to broaden our recruitment pool to provide us with some alternatives for our sample.

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

Currently we are continuing with our strategy to deliver the main intervention study online. We will determine if we need to amend or alter our approach depending on the outcome of our current recruitment plan.

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

We have overcome most of the problems that were brought on by the COVID epidemic control measures (no travel, inability to conduct study on site) by changing our strategy to online recruitment of participants and removing face-to-face data collections. We remain very aware of the ongoing issues related to recruitment of participants. In the last several months we have continued to work with students (graduate, undergraduate) in our research lab to continue to explore and interact with military institutions to gain access for email contact for potential participants. As noted earlier we have increased the numbers of individuals on our research team. We are also planning, if needed, to visit with key stakeholders on site in order to secure cooperation for email communication/recruitment of potential participants. Below is a summary of the past delays on actions that we took.

Delays: We have had delays due to covid and then problems with recruitment. We have been working with several military organizations with the hope that we could re-do our on-site study elsewhere, but these organization have long timelines for study approval processes and we were not able to negotiate a new site. Thus, we do not have the 'on-site' advantage we had while we were at Fort Hood.

Action: We have had more recruitment success in spring 2022. Although we have been working with some of these organizations for the past year, there has been movement in allowing them to help us with recruitment. We also now have 2 military-related members on our research team (one active NG, one veteran), and we have further developed a relationship with the NAU Veterans Success Center which services active-duty military and veterans.

Illinois National Guard: We are working with them for the recruitment of active-duty Army personnel through emails, their social media pages, and flyers.

JBSA (Joint Base San Antonio- made up of Fort Sam Houston, Randolph, Lackland): We are working with them for recruitment of active-duty Army personnel through emails, their social media pages, and flyers.

Yuma Proving Grounds/Fort Huachuca: We have received approval to use the education centers on post to advertise for the study. We are currently working with their personnel to get this process started.

We are currently continuing to seek out organizations to support us in case we have slow enrollment. Groups that we have been pursuing include: (1) active-duty personnel stationed at Fort Bragg, NC via advertisements in public high-traffic areas (to include, but not limited to: the Soldier Support Center, the Education Center, dining facilities [DFACs], and physical fitness/recreation centers) and via professional networks and contacts to recruit active-duty personnel of specific units stationed at Fort Bragg, NC. (2) California National Guard. We are going to start pursuing some military installations that the PI has had success with in the past (e.g., Fort Irwin). Our current plan includes focusing on them for early Fall 2022.

Changes that had a significant impact on expenditures

Nothing to report at this time.

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

Taylor, Z., Parker, A., Robles, J., Huffman, A. H., & Wayment, H. A. (2021). *An Initial Examination: Military Personnel's Work-Family Conflict Before and During the Pandemic*. Poster accepted to the American Psychological Association Annual Convention, Virtual.

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: *2 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: *2 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: *Jocelyn Robles*
Project Role: *Graduate Assistant*
Researcher Identifier (e.g. ORCID ID): *NA*
Nearest person month worked: *1 months*
Contribution to Project: *Jocelyn has been in charge of the general management of the study processes such as website, surveys and other research areas.*

Name: *Kevin Geoghegan*
Project Role: *Graduate Assistant*
Researcher Identifier (e.g. ORCID ID): *NA*
Nearest person month worked: *1 month*
Contribution to Project: *Kevin has been supporting recruitment of military personnel and related advertising.*

Name: *Dylan Bilyeu*
Project Role: *Research Associate*
Researcher Identifier (e.g. ORCID ID): *NA*
Nearest person month worked: *1 month*
Contribution to Project: *Dylan has been supporting recruitment of military personnel and related advertising.*

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: as needed
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

Appendix A – Quad Chart

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

BA150565
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PI: Huffman/Wayment

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

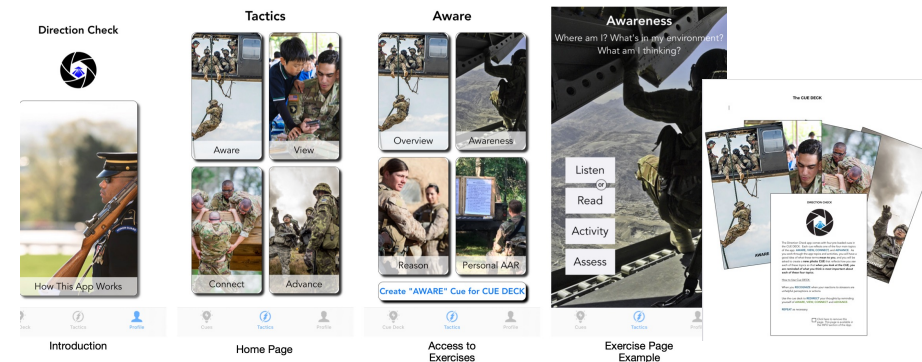
Study/Product Aim(s)

- 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

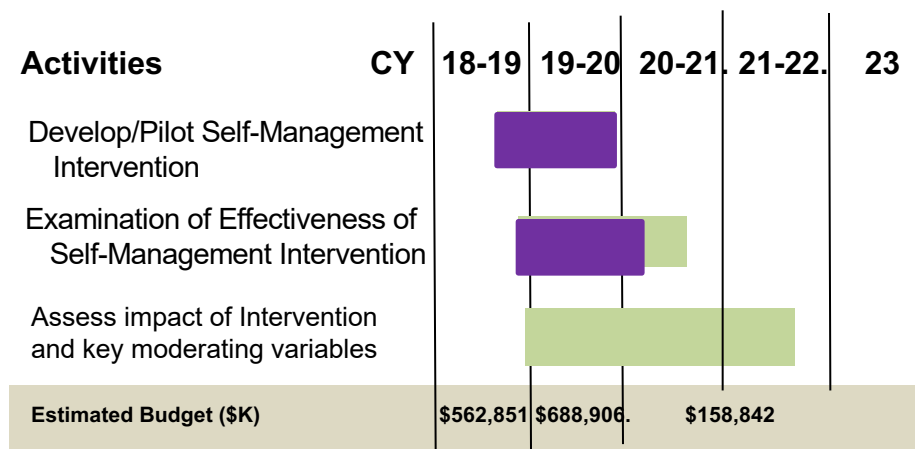
In a three-phased study, we will experimentally examine how well our adaptation of an intervention strengthens personal and occupational resources in a military occupational setting. Phase I and II consist of refinement of intervention, focus group and beta testing of phone app (Q-Core 1.0). In phase 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. Screen shots from our developed Q-Core app (renamed "Direction Check") are below:



Accomplishment: To date, no science-related accomplishments to report.

Timeline and Cost



Updated: (Jul, 2022)

Goals/Milestones

- CY18 Goal** – Develop/Pilot Self-Management Intervention
 - X Full working lab
 - X 95% of all IRB/HRPO application approved
 - X Focus groups & BRAVE Protocols completed
- CY19 Goals** – Examination of Effectiveness of Self-Management Intervention
 - X Recruitment and Study Protocol plans developed
 - X Experimental and Control Apps are finalized
 - X Ft. Hood (N = 24)/ Interrupted due to COVID
- CY20 Goal** – Assess impact of Intervention and key moderating variables
 - X Recruitment and Study Protocols altered for Online (N = 21)

Comments/Challenges/Issues/Concerns

Challenge: Had to temporarily stop data collection due to COVID19

Budget Expenditure to Date

Projected Expenditure: \$1,400,000
Actual Expenditure :\$1,144,249