AWARD NUMBER: W81XWH-19-1-0207

TITLE: Development of a Military-Specific Transdiagnostic Eating-Disorder Survey and Screening Tool in a Nationally Representative Sample of Veterans

PRINCIPAL INVESTIGATOR: Kelsie Forbush, Ph.D.

CONTRACTING ORGANIZATION: University of Kansas Center for Research, Inc.,
Lawrence, KS

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Fort Detrick, Maryland 21702-5012

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Development of a Military-Specific Transdiagnostic Eating-Disorder Survey and Screening Tool in a Nationally Representative Sample of Veterans

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6. AUTHOR(S)
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5d. PROJECT NUMBER

5e. TASK NUMBER

5f. WORK UNIT NUMBER

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)

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8. PERFORMING ORGANIZATION REPORT NUMBER

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U.S. Army Medical Research and Development Command
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13. SUPPLEMENTARY NOTES

14. ABSTRACT: Military personnel must adhere to body mass index (BMI) and bodyfat % requirements, as well as physical performance standards. Failure to maintain these standards can result in referral to weight-loss programs and, eventually, discharge from service. The emphasis on body weight within the military may promote unhealthy attempts at weight loss and the development of eating disorders (EDs). If left untreated, EDs result in significantly greater VA healthcare utilization and physical and psychiatric morbidity and mortality. Yet, despite the public-health importance of addressing EDs in active-duty and veteran populations, there are no universal ED screening measures implemented in the VA system and there are no national VA treatment programs for EDs. Our primary objectives are to validate/develop: 1) a transdiagnostic ED assessment for use in VA research and clinical settings and 2) a transdiagnostic short-form screening tool to identify veterans with an eating, mood, anxiety, or trauma-related disorder. Objectives will be achieved through two large studies that will recruit nationally representative samples of veterans separated from service within the past year. We used item-response theory analysis to develop a preliminary trans-diagnostic screening tool as part of Aim 1. We are now poised to launch our final aims within the next few months, which are expected to result in the final development and validation of a novel screening tool.

15. SUBJECT TERMS Eating disorders; assessment; screening tools; veterans					
16. SECURITY CLASSIFICATION OF: U			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON USAMRMC
a. REPORT U	b. ABSTRACT U	c. THIS PAGE U	UU	19	19b. TELEPHONE NUMBER *(include area code)*

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1. INTRODUCTION:

Despite the seriousness of eating disorders (EDs) among active-duty and veteran populations, there are currently no tools developed for use in military personnel or veterans to screen for possible EDs. Thus, there is a **critical need** to develop screening tools to identify and refer veterans with EDs for treatment. Our **central hypothesis** is that an integrated transdiagnostic framework for assessing EDs will lead to improvements in the ability to identify veterans who are most at-risk for poor post-discharge psychosocial adjustment who need referral to treatment services. Our **preliminary data strongly** supported our hypothesis, specifically the need for transdiagnostic screening tools to accurately identify disordered eating in veterans. To address this need, we created a self-report measure – the Eating Pathology Symptoms Inventory (EPSI) – that has been shown to more comprehensively measure disordered eating concerns in both men and women. Our preliminary data showed that veterans' scores on certain EPSI scales were higher than outpatients being treated for an ED. Moreover, our previous work in civilians with EDs showed that by combining the EPSI with a proven measure of depression, anxiety, and trauma (the Inventory of Depression and Anxiety Symptoms – II [IDAS-II]), we were able to predict future recovery and psychosocial adjustment at three and six-month follow-up. Although the EPSI and IDAS-II represent potentially useful screening measures, the total number of items across these measures is 144, which is too long for screening purposes. Thus, our **primary objective** is to create a short-form screening tool based on the EPSI and IDAS-II to identify veterans who may have an eating, mood, anxiety, or trauma disorder. **Secondary objectives** are to: **1)** test relationships among eating, mood, anxiety, trauma, and substance misuse in the first six months following discharge and **2)** conduct interviews in a subset of 100 veterans on perceived institutional/organizational barriers to obtaining ED and trauma-related treatment during active duty. Objectives will be achieved through two studies. **Study 1:** Veterans (N=1,000) will complete the EPSI and IDAS-II at four time points. We will assess the reliability and validity of these measures in veterans and develop a short-form screener. **Study 2:** Veterans (N=400) will complete our new shorter form and we will test whether our screen can identify true cases of eating, mood, anxiety, and trauma disorders. Post 9/11 veterans (discharged within the past year) will be recruited from the VA/DoD Identity Repository.

2. KEYWORDS:

Eating disorders; veterans; assessment; screening tools; depression; anxiety; post-traumatic stress disorder

3. ACCOMPLISHMENTS:

What were the major goals of the project?

Primary Objectives: Our primary objectives are to validate/develop: **1)** the Eating Pathology Symptoms Inventory (EPSI) and Inventory of Depression and Anxiety Symptoms-II (IDAS-II) for use in VA research and clinical settings and **2)** a short-form (brief) screening tool based on the EPSI and IDAS-II to identify veterans who may have an eating, mood, or anxiety disorder (including trauma).

Secondary objectives: Our secondary objectives are to: **1)** elucidate temporal relationships among ED symptoms and internalizing and externalizing psychopathology in the first six months following military discharge and **2)** obtain qualitative data on perceived institutional/organizational barriers to obtaining ED and trauma-related treatment during military service.

As stated in our approved SOW, we had the following major goals with target dates within the time-frame of this progress report.

Major Task 1: Prepare Research Protocol

Milestone Achieved: All sites IRB approval (100% achieved)

- Finalize human subjects' protocol and secure IRB approval.
  - *Target Date*: Pre-award to 3 Months.
  - *Completion Date*: 11/06/2019
- Coordinate with sites for IRB protocol submission.
  - *Target Date*: Pre-award to 3 Months.
  - *Completion Date*:11/06/2019
- Coordinate among sites for annual IRB continuing reviews.
  - *Target Date*: As needed. NEEDS completion date
- Receive DoD HRPO approval.
  - *Target Date*: Pre-award to 6 Months. *Completion Date*: 12/06/2019

Major Task 2: Hiring and Training

Milestone Achieved: Research staff trained (100% achieved)

- Advertise and interview for project-related staff.
  - *Target Date*: Pre-award to 6 months
  - *Completion Date*: 10/31/2019
- Hire and train staff. *Target Date*: 1-6 Months
  - *Completion Date*: 02/04/2020
- Provide training to research staff in issues relevant to military and veteran culture.
  - *Target Date*: 4-6 Months
  - *Completion Date*: 09/27/2019

Major Task 3: Participant Recruitment and Testing

Milestone Achieved: First participant returns online or mail-in survey (100% achieved)

- Coordinate with sites to ensure readiness for data collection. *Target Date*: 3-6 Months
  - *Completion Date*: 01/27/2020
- Extract data from VADIR to obtain list of potential participants to recruit.
  - *Target Date*: 6 Months
  - *Completion Date*: 12/30/2019
- Initiate subject recruitment and survey mailing (N=4,500 invited participants to achieve target sample size of N=1000).
  - *Completion Date:* 09/01/2020

Milestone Achieved: Aim 1 data collection completed (10% achieved)

- All baseline surveys are completed.
  - *Target Date*: 12 Months (72.1% achieved)
- Initiate follow-up survey mailings.
  - *Target Date*: 6 Months.
  - *Completion Date:* 09/01/2020
- All follow-up surveys are completed.
  - *Target Date*: 18 Months (14.5% achieved)

Major Task 4: Data Entry, Cleaning, and Analysis

Milestone Achieved: Survey database is cleaned and ready for analysis (10% achieved)

- Baseline data are entered and cleaned.
  - *Target Date*: 14 Months. (65.2% achieved)
- Follow-up data are entered and cleaned.
  - *Target Date*: 18 Months.

Milestone Achieved: Survey database is cleaned and ready for analysis (10% achieved)

- Data Analysis for Aim 1
  - *Target Date*: 18-21 Months.

Major Task 5: Aim 2 Participant Recruitment and Testing

Milestone Achieved: First participant returns online or mail-in survey (33.3% achieved)

- Coordinate with sites to ensure readiness for Study 2 data collection.
  - *Target Date*: 21-23 Months.
  - *Completion Date:* 07/12/2021
- Extract data from VADIR to obtain list of potential participants to recruit.
  - *Target Date*: 24 Months
  - *Completion Date:* 04/13/2021
- Initiate subject recruitment and survey mailing (N=1,000 invited to participant to achieve target sample size of N=400).
  - *Target Date*: 24 Months

Milestone Achieved: Aim 2 data collection completed (0% achieved)

- All surveys are completed.
  - *Target Date*: 30 Months
- Initiate interviews.
  - *Target Date*: 24 Months
- All interviews are completed.
  - *Target Date*: 33 Months

Major Task 6: Aim 2 Participant Recruitment and Testing

Milestone Achieved: Survey database is cleaned and ready for analysis (0% achieved)

- Data entered and cleaned.
  - *Target Date*: 33-36 Months

Milestone Achieved: Sensitivity, specificity, positive/negative predictive power, and ROC curve analyses completed (0% achieved)

- Data analyses for Aim 2.
  - *Target Date*: 34-36 Months

Milestone Achieved: Report results from Aim 1 and Aim 2 analyses (0% achieved)

- Collaborate as a team to disseminate findings (presentations, publications, VA)
  - *Target Date*: 24-36 Months

Major Task 7: Exploratory Aim 1 Data Analysis

Milestone Achieved: Exploratory Aim 1 analyses are completed. (0% achieved)

- Conduct linear mixed model analyses.
  - *Target Date*: 24-27 Months

Major Task 8: Exploratory Aim 2 Qualitative Interview Development, Testing, and Analysis

Milestone Achieved: Qualitative semi-structured interview developed and interviewers trained (0% achieved)

- Develop and pilot test qualitative survey questions with study team experts.
  - *Target Date*: 9- 18 Months
- Train graduate-student interviewers to conduct qualitative interviews.
  - *Target Date*: 16-18 Months

- **Milestone Achieved: Qualitative analyses are completed (0% achieved)**
  - Qualitative interview coding and analysis *Target Date*: 24-36 Month

What was accomplished under these goals?

Major Findings, Developments, or Conclusions

As noted on the previous page, we have met Major Tasks 1-3 in our Statement of Work (SOW) and we are currently finalizing data collection for Aim 1. Participant data is being collected and cleaned to meet data analyses milestone for Aim 1 at this time.

Number of baseline surveys completed: 817 (full responses)
Number of baseline surveys that have been entered and cleaned: 766

We successfully cleaned the data that we have collected over the summer and created a preliminary version of our transdiagnostic screener, which we named the "Brief Assessment of Stress and Eating" or BASE. To identify items to include in the BASE, we conducted analyses of the Eating Pathology Symptoms Inventory (EPSI) and Inventory of Depression and Anxiety Symptoms-II (IDAS-II) to determine which scales had most relevance toward our aims. On the next page we describe our results that were used to select scales.

Next, we conducted item response theory (IRT) analyses to identify which items within our chosen scales had the best ability to discriminant among low and high levels of eating-disorder and internalizing symptoms and which items were most reliable in assessing our chosen constructs. Please refer to the following page for details on our analyses.

Based on these analyses, we chose 9 items from the EPSI and 7 items from the IDAS-II for a total of 16 items in the BASE. However, because some of the traditional items that are used to screen for purging behaviors in existing screeners performed poorly in our IRT analyses, we wrote two additional items and we will administer some additional items from the EPSI to further test the performance of purging items in our Aim 2 sample. This approach will enable our team to collect additional data to best inform the item selection for the final version of the BASE.

In conclusion, we have made huge strides since our last progress report and are nearing completion of Aim 1. We anticipate we will initiate our final grant aims within the next two months.

Stated Goals Not Met

As stated above, we are on track with Aim 1 analyses and are ready to launch our final aims within the next two months.

We originally proposed to recruit 1,000 veterans in Aim 1, but experienced some delays due to university-wide shut-downs of research in March 2020 that required us to modify our protocols. We successfully made these modifications, securing appropriate IRB approvals, but experienced additional delays in the U.S. Postal Mail responses over the past year. Despite these challenges, we are excited about our excellent progress. For example, although most studies that use the VA/DoD Identity Repository (VADIR) to recruit veterans have a 30% retention rate, we have 48.6% retention in our longitudinal design, meaning that we likely will not need to recruit as many veterans to achieve desired power at our six-month follow-up. We also found that we had sufficient power to test Aim 1 analyses with a sample of ~700, which means that even if we do not achieve the full N=1,000, we will have sufficient numbers of participants to carry out fully powered analyses of our primary and secondary aims. Given we sent additional mailings to boost our sample size in Spring and Summer 2022, recruiting fewer subjects will help us finish the study within our budget.

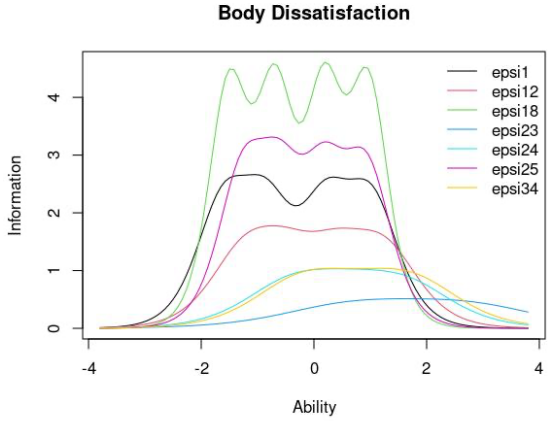
Major Activities: Major activities included **1)** Hiring and training, **2)** Participant recruitment and data cleaning, **3)** Data Analyses Aim 1, **4)** Development of the preliminary version of the BASE.

Below we elaborate on our accomplishments:

Hiring and Training: We hired two additional full-time Project Coordinators, Mr. Colin O'Brien, and Mr. Robert "Will" Morgan, who received one-on-one training under the supervision of Drs. Forbush and Swanson and Ms. Christian. Training included group trainings on issues related to the study protocol, learning Aim 2 assessments, and building leadership/supervisory skills, as well as attending three weekly meetings with the KU study team, and monthly team meetings with the full project team from collaborating institutions.

Participant Recruitment, Data Cleaning, Data Analyses, and Preliminary version of the BASE: In terms of participant recruitment for the baseline survey, we currently have a total of 849 individuals who consented to participate. To clean data, we wrote a comprehensive script in R that is used to clean the data and convert all relevant responses into coded numeric values, while also flagging incomplete and potentially invalid responses. After removing invalid responses (i.e., people who did not complete any items on the survey), we have complete responses for 817 participants. Additionally, we have a content validation check to screen out participants who may either be inattentive or provided potentially inaccurate responses. Specifically, we flagged 27 participants who indicated, on one scale item, that they had never self-induced vomiting over the course of their lifetime, but then later in the survey reported that they had self-induced vomiting within the past month. Thus, our grand total of completed, valid responses is currently $N = 790$.

To select items for use in our preliminary version of the BASE, we performed a series of analyses using $N = 559$ complete responses from the baseline survey. For these analyses we began by computing the composites for all subscales of both the EPSI and the IDAS-II, and used these in a series of linear regression models where the subscales were used to predict clinical impairment (measured by the CIA), psychosocial impairment (measured by the WHODAS), and self-reported eating disorder diagnoses (as measured by the EDE-Q). Using a machine learning algorithm designed to detect the most important and reliable predictors of these outcomes—a process called *stability selection*—we were able to determine the subscales from each measure that performed best in predicting outcomes. The results of this analysis, along with theoretical considerations, led us to choose 6 subscales from the EPSI and 4 subscales from the IDAS-II to sample items for constructing the BASE. We then performed an item analysis on each subscale using a graded response model—a method from Item Response Theory—which allowed us to obtain item information curves for each scale item. We used these results to select our final items for the BASE. Specifically, we chose items that struck an optimal balance between the threshold and discriminability of each item, such that we could maximize the range of scores for which an item represented each subscale, as well as the extent to which it could be used to distinguish different levels of eating-disorder severity. As a result, our preliminary BASE screener is comprised of 16 items, with 9 items drawn from the EPSI, and 7 items drawn from the IDAS-II.



To the left is an example of the item information curves related to items from the Body Dissatisfaction subscale from the EPSI. Higher values on the y-axis indicate the item had higher discrimination and provided more information about the overall subscale. For this subscale, we selected item 18 (*I did not like how my body looked*) for the BASE, as it contained more information about the subscale than all other items and performed well across the range of scores.

Stated Goals Not Met

In terms of participant recruitment and testing, it was necessary to recruit an additional second sample of participants from VADIR (*N*=10,000) due to issues with several mailings being returned in our initial recruitment due to incorrect addresses. However, we implemented new procedures to "screen out" incorrect addresses by sending a pre-mailing post-card to verify addresses and, then sending a full mailing. This led to a robust additional response and our ability to test Aim 1 analyses and create a preliminary version of the BASE. Although we are slightly below our N=1,000 participant recruitment goal, we had a much better retention rate than we expected, which means that our current sample is sufficient for carrying our primary and secondary objectives.

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

The entire study team has received numerous, extensive trainings on data management, diagnosis of mental disorders, and military culture (e.g., Dr. Melinda Gaddy led an 1.5 hour training on substance use assessment in the military, Dr. Joanna Wiese led a 1.5 hour training on suicide assessment in the military, and Ms. Brianne Richson led a training about how to assess suicidality in clinical interviews). The KU team has also received a detailed training of programming in R led by Dr. Swanson in a week-long workshop that used data collected from the current study to teach team how to perform various R-based functions and analyses.

Several new RAs and graduate research assistants have received training over the course of this reporting year to meet project milestones and study aims. RAs meet bimonthly with project coordinators, as well as weekly with the KU team in full.

In addition to the activities described above, below we elaborate on additional professional development opportunities provided to research team:

Group Training Workshop: We developed a database management training program for DoD grant team members. The training provided an overview of the participant tracking database, REDCap. The goal was to provide a better understanding of the database prior to the launch of the study. Team members were asked to watch a series of tutorial videos before the training. The training included a demonstration of the database. A list of individualized tasks was assigned to the lab members to complete on a mock training database. Lab members were required to complete the list of tasks correctly before they were allowed to have access to the project on the database. Additionally, Dr. Swanson developed an intensive R-Studio workshop, which consisted of several two-hour teleconference sessions over the course of a week. This training covered the essentials of working in R for experienced and new users. Dr. Melinda Gaddy gave a training workshop on substance usage in respect to U.S. military culture. Joanna Wiese presented a training workshop to the full DoD on PTSD psychopathology in July 2021. Brianne Richson gave a detailed presentation on suicidal behavior and suicidality risk assessment in August 2021.

Lab Meetings/DoD Project Meetings: The research laboratory meets each Friday morning for one hour to discuss progress across all laboratory projects. Laboratory meetings also involve discussion of research articles and presentations by graduate students and post-doctoral fellows and critique of these projects to facilitate professional development. Our team also meets once per week on Fridays to review all diagnostic assessments conducted in the laboratory. All senior personnel on the grant meet once per month via Zoom.

Individual Meetings: Dr. Forbush meets regularly (monthly or bi-monthly) with the Project Coordinators (Mr. O'Brien & Mr. Morgan) and (weekly) with Post-Doctoral Fellow (Dr. Swanson) to talk about study progress, grant and individual research goals and progress, and provide one-on-one training across numerous areas (e.g., instruction on how to submit IRB proposals). Dr. Swanson meets weekly with the Project Coordinators and undergraduate researchers to "check in" on study goals and progress.

Other Opportunities: The University of Kansas offers a wealth of additional opportunities for professional development (see https://kupce.ku.edu/browse-subjects), including leadership training; training in information technology; and offers numerous workshops and events that are often free to KU staff members.

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?

Nothing to Report.

We began Aim 1 recruitment in September 2020. We anticipate that data collection for Aim 1 will be complete in October or November 2021. Following completion of data collection for Aim 1, we will finalize the database after it has been cleaned. Dr. Swanson has already downloaded and cleaned the data we have collected thus far, and created an R algorithm that will auto-clean the rest of the data, once it is available through Qualtrics. As described above, we have already carried out most of the main Aim 1 analyses and developed a preliminary version of the BASE. We are currently finalizing training for the protocol for Aim 2, which we anticipate will be completed in October or November 2021. Thus, we expect to initiate the rest of the study aims within the next two months. We expect to have completed the data collection for all study aims by the end of the funded period. We plan to present preliminary results to report to the community during our next annual reporting period. We will also present our work at VA mental-health conferences, such as the VA Health Service Research and Development conference, and locally at our KU-VA Networking events. The KU-VA Networking events are two-hour programs to introduce VA researchers/clinicians to KU faculty researchers and feature research presentations and discussions to facilitate introductions and provide a useful exchange of research interests and resources. We plan on presenting on the aims, goals, and preliminary findings for Aim 1 of this grant at one of the KU-VA networking events during the next reporting period. To ensure that our work is accessible to the general public, we will collaborate with our press offices to create press releases to disseminate our work as results become available. Finally, we are working on a paper to describe the study methodology which we plan to submit to the International Journal of Methods in Psychiatric research in December 2021 or January 2022. This will provide an overview of our methods for future users of our database, once we make the data publicly available.

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

The initial mailing sent in September 2020 suffered from low response rates partially attributable to the effects of COVID-19, mailing delays, and a significant amount of mail that was returned due to the provided addresses being inaccurate. Approximately 42% of participants had returned mail due to bad addresses. This issue was resolved by sending postcards to participants prior to the actual invitations in order to determine which participants' addresses were incorrect. To increase sample size, a second baseline mailing was sent to 10,000 participants on April 23rd, 2021.

Due to effects from the ongoing pandemic, mailing services were significantly affected and thus the study's mailings were often delayed. To account for this issue, language was added to the mailings to notify participants that, due to mailing delays, they may receive further mailings even if they had completed the survey or declined participation.

Due to budget constraints, the mailing process was slightly altered. Rather than sending out the paper surveys in both the fourth and fifth baseline mailings, paper surveys will now only be sent in the fifth mailing, if requested, to reduce printing costs.

To account for the large number of incorrect addresses, an increased number of mailings will be sent for Study 2 to reach the target sample size. Approximately 7,000 invitations will be sent.

Despite delays in our mailings, we have adjusted rapidly and are excited to report that we have collected sufficient data to conduct well-powered analyses of our primary and secondary aims, have developed a preliminary version of the BASE for further testing and refinement in Aim 2, and are poised to initiate the final aims of the study within the next two months.

Changes that had a significant impact on expenditures

Payroll: (note: 3 have been hired in the past year, including 2 research aides and 1 student hourly employee).
Fringe: Supplies:
Other:
Subrecipient (contract) with F&A:
with encumbered
Sub with no F&A: with
encumbered
Facilities and administration:

Total of all expenses:

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

Nothing to report.

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

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: Kelsie Forbush, PhD
Project Role: Principal Investigator
Researcher Identifier (e.g. ORCID ID):
Nearest person month worked: 6
Contribution to Project: No change.

Name: Alesha Doan, PhD
Project Role: Co-Investigator
Researcher Identifier (e.g. ORCID ID):
Nearest person month worked: 1
Contribution to Project: No change.

Name: Qianqi (Chelsea) Song, PhD
Project Role: Co-Investigator
Researcher Identifier (e.g. ORCID ID):
Nearest person month worked: 1
Contribution to Project: No change.

Name: David Watson, PhD
Project Role: Co-Investigator
Researcher Identifier (e.g. ORCID ID): https://orcid.org/0000-0001-9632-2159
Nearest person month worked: 2
Contribution to Project: No change.

Name: Mary Oehlert, PhD
Project Role: Co-Investigator
Researcher Identifier (e.g. ORCID ID): N/A
Nearest person month worked: 1
Contribution to Project: No change.

Name: Joanna Wiese, PhD
Project Role: Co-Investigator
Researcher Identifier (e.g. ORCID ID): N/A
Nearest person month worked: 1
Contribution to Project: No change.

Name: Mike Denning
Project Role: Co-Investigator
Researcher Identifier (e.g. ORCID ID): N/A
Nearest person month worked: 1
Contribution to Project: No change.

Name: Trevor Swanson, PhD
Project Role: Post-Doctoral Fellow
Researcher Identifier (e.g. ORCID ID): N/A
Nearest person month worked: 9
Contribution to Project: No change.

Name: Colin O'Brien
Project Role: Project Coordinator
Researcher Identifier (e.g. ORCID ID): N/A
Nearest person month worked: 2
Contribution to Project: Mr. O'Brien attended planning meetings and monthly team meetings. He has monitored study participation, assisted in mailing of recruitment materials and in completing IRB modifications, and is currently working on the database for study 2 of the project. He has also assisted in the training of new research assistants.

Name: Will Morgan
Project Role: Project Coordinator
Researcher Identifier (e.g., ORCID ID): https://orcid.org/0000-0002-0188-2709
Nearest person month worked: 3
Contribution to Project: Mr. Morgan coordinated and attended planning meetings and monthly team meetings. He has overseen mailing recruitment materials and monitored study participation as well as assisted with IRB modifications. He has also assisted in the training of new research assistants.

Name: Sarah Nelson
Project Role: Project Coordinator
Researcher Identifier (e.g. ORCID ID): N/A
Nearest person month worked: 8
Contribution to Project: Ms. Nelson is no longer working on the project.

Name: Melinda Gaddy, PhD
Project Role: Co-Investigator
Researcher Identifier (e.g. ORCID ID): N/A
Nearest person month worked: 1
Contribution to Project: No change.
Funding Support: VA Eastern Kansas Healthcare System

Name: Angie Nordhus
Project Role: Grant Coordinator
Researcher Identifier (e.g. ORCID ID): N/A
Nearest person month worked: 12
Contribution to Project: No change.
Funding Support: Life Span Institute – University of Kansas

Name: Anjali Sharma
Project Role: Undergraduate RA
Researcher Identifier (e.g. ORCID ID): N/A
Nearest person month worked: 3
Contribution to Project: No change

Name: Joe Ayres
Project Role: Undergraduate RA
Researcher Identifier (e.g. ORCID ID): N/A
Nearest person month worked: 3
Contribution to Project: 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?

Organization Name: VA Eastern Kansas Healthcare System
Location of Organization: Leavenworth, KS
Partner's contribution to the project: Collaboration

Organization Name: University of Notre Dame
Location of Organization: (if foreign location list country): Notre Dame, Indiana
Partner's contribution to the project (identify one or more): Collaboration

Organization Name: Purdue University
Location of Organization: (if foreign location list country): West Lafayette, Indiana
Partner's contribution to the project (identify one or more): Collaboration

8. **SPECIAL REPORTING REQUIREMENTS**

COLLABORATIVE AWARDS: Not applicable.

QUAD CHARTS: Not applicable.

9. **APPENDICES:** Not applicable.