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<b>13. SUPPLEMENTARY NOTES</b>					
<b>14. ABSTRACT</b> This study was designed to compare a MET intervention to Treatment as Usual (TAU, treatment resource and referral) in reducing PTSD and increasing treatment engagement. One hundred and sixty three active duty service members were randomized to MET or TAU. MET participants (n=82) received up to three 45-60 minute telephone sessions in weeks 1, 4 and 8 (post baseline) whereas comparison participants were mailed psycho-education materials about PTSD, resource and referral information. Follow-up assessments were conducted immediately post-intervention, and 3, and 6 months post-baseline. Mixed effect model results indicated treatment uptake significantly increased over time but there were no significant differences between conditions or interactions. PTSD symptom severity significantly decreased for both conditions. There was also a significant three-way interaction with baseline readiness-to-change confidence. Those low in baseline readiness-to-change saw more favorable effects of MET (relative to TAU) at 6-month follow-up. Results suggest both MET and high-quality referral options have promise as means of increasing evidence-based treatment uptake and decreasing PTSD for service members with PTSD. MET may be particularly useful for individuals with low confidence in their ability to address PTSD. Given the individual and societal costs of PTSD, there is need for interventions facilitating treatment uptake.					
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## TABLE OF CONTENTS

	<u>Page</u>
1. Introduction	4
2. Keywords	4
3. Accomplishments	4-10
4. Impact	10-11
5. Changes/Problems	11-12
6. Products	12-16
7. Participants & Other Collaborating Organizations	16-20
8. Special Reporting Requirements	20
9. Appendices	22

## 1. INTRODUCTION:

Rates of PTSD in active-duty military are high relative to the general population. Although efficacious treatments exist, they are underutilized. Many service members with PTSD do not present for treatment and, of those who do, many do not receive sufficient doses of the interventions to receive full benefits. Motivational Enhancement Therapy (MET) “check-ups”, are brief interventions designed to elicit treatment engagement for those who are not treatment-seeking. The purpose of this research was to develop and evaluate the StressCheck, a MET intervention for nontreatment seeking active-duty personnel. The StressCheck aims to improve PTSD and increase treatment engagement, especially around evidence-based interventions, as well as to decrease stigma about seeking mental health services and improve knowledge about treatment options. In phase 1 of the research, advertisements and the MET intervention content were developed with the feedback of key constituents in focus groups. Phase 2 of the research evaluated the MET intervention in comparison to treatment as usual (TAU) in a randomized clinical trial that included 164 active-duty Army, Air Force and Navy personnel.

## 2. KEYWORDS:

Active duty, post-traumatic stress disorder, Motivational Interviewing, Motivational Enhancement Therapy, telehealth, military personnel, personalized feedback, randomized controlled trial

## 3. ACCOMPLISHMENTS:

The purpose of this study was to (1) develop a marketing campaign to reach and elicit voluntary enrollment in a PTSD Check-Up of untreated Army and Air Force personnel with PTSD, to (2) develop a 3-session motivational enhancement therapy (MET) feedback protocol that promotes treatment engagement and/or self-directed PTSD recovery, and to (3) evaluate the efficacy of this novel intervention in a randomized clinical trial (RCT;  $N = 200$ ), using a treatment as usual (TAU) comparison condition.

The major goals for this project were as follows:

1. Coordinate study staff and collaborator relationships
  - a. Hire and train study staff (*October 2017*)
  - b. Develop and maintain collaborator relationships
    - i. Obtain letters of support from key stakeholders at JBLM (*April 2017*)
    - ii. Provide regular updates to, and maintain relationships with stakeholders (*April 2017- October 2022*)
2. Develop marketing campaign and PTSD Check-Up Intervention
  - a. Conduct 3 focus groups with key constituencies to inform materials development (*May 2017*)
  - b. Develop marketing/recruitment campaign (*October 2017*)

- c. Develop 3-session MET intervention (*November 2017*)
3. Conduct RCT comparing novel MET intervention to TAU
  - a. Obtain necessary regulatory documents (*August 2017*)
  - b. Begin RCT (*November 2017*)
  - c. Complete RCT (*September 2021*)
4. Data analysis and dissemination (*October 2022*)
  - a. **What was accomplished under these goals?**

Over the course of the trial, we accomplished all goals and aims outlined in the SOW as indicated above. A summary of the major accomplishments are provided by Aim below.

### **Develop a marketing campaign (Aim 1) and PTSD Check-Up Intervention (Aim 2).**

StressCheck is designed for active-duty service members with PTSD not currently engaged in evidence-based PTSD treatment. The goal is to increase treatment engagement, move participants toward treatment, and toward more effective treatment. We began the development of the advertisements and intervention by drafting example materials of advertisements and the intervention content for the personalized feedback report (PFR) utilized in session 1 based on our experiences in our prior Warrior Check-Up trial (Walker, et al., 2017). Focus groups were then conducted with 3 key stakeholder groups: behavioral health providers who offer PTSD treatment and who serve active-duty military personnel (n = 8), soldiers or airmen who engaged in treatment for PTSD (n = 8), and soldiers or airmen who experienced probable PTSD but who did not seek treatment (n = 6). Focus groups sought feedback on advertisement and intervention content which informed further refinement of both. This content was then used in the randomized clinical trial. A summary of findings from the focus groups can be found in the appendices. Briefly, focus group feedback suggested several modifications to mitigate the stigma of PTSD in advertisements including emphasizing confidentiality, stating “Command not involved”, styling the ads to look “civilian” versus military, and avoiding using the term “PTSD”, instead emphasizing key unwanted symptoms (avoiding crowds, insomnia, irritability) in advertisements (see appendices for example advertisements). Focus group participants recommended reordering the MET intervention to start the intervention with Life Goals and thus more squarely emphasize the strengths-based framework of the intervention. Other recommendations included omitting sections of the PFR related to suicidal ideation and depression due to fear and concerns of repercussions of such disclosure and normalizing reactions to trauma (see appendices for the MET manual and sample PFR). More detailed findings from focus groups can be found in our published protocol paper (see appendices, Kaysen, et al., 2022).

### **Conduct a randomized controlled trial comparing the efficacy of the PTSD Check-Up MET intervention to treatment as usual (Aim3).**

A full description of study methodology can be reviewed in our protocol paper (see appendices, Kaysen, et al., 2022) and main outcome findings are detailed in a manuscript under review (see appendices, Walker, et al., under review). Methods and findings are briefly summarized here. This randomized clinical trial was conducted by phone including assessments and intervention. Screening initially occurred either via phone or online. Enrolled participants were randomly assigned to receive either the StressCheck MET intervention (n = 82) consisting of up to 3 individual sessions or treatment as usual (TAU, n = 79) consisting of a curated resource and referral packet mailed or emailed to the participant. Participants were assessed at baseline, 6 weeks, 3- and 6-month follow-ups. Follow-up rates were excellent (6 week, 91%, 3-month, 86%, 6-month, 86%).

Study hypotheses were:

- 1) Individuals receiving MET would report more PTSD treatment seeking than the comparison condition at follow-up.
- 2) Individuals receiving MET would report fewer PTSD symptoms at follow-up than the comparison condition.
- 3) The effect of the intervention on PTSD symptoms would be mediated by treatment engagement.
- 4) The effect of the intervention on PTSD and on treatment engagement will be moderated by readiness to change, where the MET intervention will be more effective for those lower in readiness to change.

The study initially recruited from Joint Base Lewis McChord and, based on feedback from our IPR, eventually pivoted to national recruitment and expanded to include Navy personnel. Over the course of the study, 1896 individuals expressed interest in the study (933 Veterans and thus, ineligible), 479 active-duty service members were screened for eligibility. Of the 167 servicemen who were eligible, 163 enrolled. Eligibility criteria included: active-duty Army, Air Force or Navy, current diagnosis of PTSD as assessed by the CAPS. Exclusion criteria were: currently enrolled in treatment for PTSD, impending deployment within the next 7 months, and active psychosis. Most common reasons for exclusion were currently in PTSD treatment or not meeting criteria for a PTSD diagnosis.

Participants were predominantly Army personnel (80%), followed by Air Force (16%) and Navy (4%) and male (69%). On average, participants were 29 years old. The sample was predominantly white (white (75%), black (10%), Hispanic (13%), Asian or Pacific Islander (2.5%), American Indian (2%), and multi-racial (5.5%)). Average CAPS score was 34.4 at baseline, with the most common index traumas including combat (40%), sexual assault (28% overall, 17% military sexual assault) and non-combat related violent death (13%). Most service members (89%) had attempted some form of treatment services for PTSD, with 79.5% having previously tried psychotherapy, 48.4% having seen a psychiatrist, and 37.9% having talked to a primary care provider.

The primary statistical approach entailed linear mixed modelling with main effects of treatment expressed as condition  $\times$  time interactions. All models controlled for demographics (e.g., age, sex assigned at birth), military-specific descriptives (e.g., service branch, active-duty), and baseline clinical characteristics (e.g., treatment confidence, readiness to change). Missing follow-up responses were imputed using multivariate chained equations (MICE) using all covariates and outcome variables. In a separate model, moderation effects of readiness-to-change were estimated by adding three-way interaction terms (i.e., Condition  $\times$  Time  $\times$  Readiness-to-Change). Finally, mediation models tested indirect effects of MET on treatment uptake and PTSD symptoms via changes in perceived stigma and confidence in treatment.

## Results

No unintended consequences or harms to participants were observed or reported during the trial. Follow-up completion rates were high for the full sample with 90.8% completion at 6-week follow-up and 85.9% completion at both 3- and 6-month timepoints. StressCheck was found to be highly acceptable with 91% of participants completing session 1, 82% completing session 2, and 62% of participants completing 3 sessions, of which sessions 2 and 3 were optional. Similarly, satisfaction ratings for the intervention were very high with most participants feeling “respected” (96%), and “understood” (84%). Outcomes were plotted by timepoint and condition to provide a descriptive overview of changes in outcomes across the timepoints (figure 1).

No significant differences were detected between conditions for PTSD treatment uptake at any of the longitudinal follow-ups; thus, MET did not significantly differ from treatment as usual (H1). Moderation models testing condition  $\times$  readiness-to-change interactions on treatment uptake were all null (H4). The second primary outcome, PTSD symptoms, decreased significantly for both conditions across 3- and 6-month follow-ups, as shown in significant main effects of time. The two conditions did not differ at either follow-up, indicating MET did not reduce PTSD symptoms to a greater extent than treatment as usual (H2). Mediation analyses regarding treatment engagement as a mediator for reduction in PTSD symptoms was, thus, inappropriate (H3). There was, however, a significant interaction effect with readiness-to-change, such that the MET condition worked significantly better with regard to reductions in PTSD symptoms for those who were *lower* in readiness-to-change (specifically, their confidence in their ability to change) at baseline (H4).

Additional analyses were conducted to test indirect effects of MET via changes in stigma and perceived confidence in treatment. However, MET, relative to treatment as usual, did not reduce perceived stigma, nor increase confidence in treatment.

## Implications

Findings from this clinical trial show that, relative to baseline, both MET and treatment as usual have small but potentially meaningful effects on treatment engagement and

PTSD symptoms; however, the hypothesis that MET would outperform treatment as usual was not supported. Nevertheless, findings did show that MET may be more effective for those military personnel who are lower in their confidence in treatment, which warrants deeper investigation into MET (or similar) as an option for those who are resistant to or have low confidence in existing PTSD treatments.

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

Although the project was not intended to provide training and professional development opportunities, several opportunities arose.

*Postdoctoral Fellows:* We trained four postdoctoral research fellows over the course of this study, all of whom are clinical psychologists. First, we created a postdoctoral fellow position to oversee the management of the project. Drs. Hannah Bergman and Adam Pierce were trainees in the role of Project Director and gained research experience with active-duty populations, randomized clinical trials, and efficacy trial implementation. Both have completed their training and have been hired as clinical psychologists working for the Veterans Administration. Two additional postdoctoral trainees, funded on an NIH T32, joined our team over the course of the trial (Drs. Emily Dworkin and Anna Jaffe) to gain training in research with military populations. These fellows participated in project team meetings and have contributed to analysis of study findings and dissemination (manuscripts, conference presentations).

*Graduate Students:* Dr. Thomas Walton, a Social Work doctoral student who worked on the project in various roles, gained valuable experience in the area of military research, RCT development and implementation, data analysis and dissemination of study findings and was closely mentored by Drs. Walker and Kaysen. Dr. Walton is currently on an NIH funded T32 as a postdoctoral research fellow. Ms. Bailey Schoenberger, a PsyD graduate student at Palo Alto received training and supervision from Dr. Kaysen in PTSD research and clinical methods. She is currently on internship at the Minneapolis VA. Both graduate students received specialized training and supervision on CAPS administration. Ms. Anna Howard utilized project data for her MPH thesis under the mentorship of Drs. Isaac Rhew and Walker (thesis committee).

*Undergraduate Students:* James Randall was a Bachelor's of Social Work student and Veteran who joined our research team to increase his understanding of research methodology and intervention development and contribute his cultural competence as an Army Veteran. Milo Dowling, an undergraduate in psychology, received training and experience in military culture, and recruitment and outreach of military populations.

*Advanced training in Motivational Interviewing:* Dr. Walker attended the Motivational Interviewing Network of Trainers conferences (2017, 2018, 2019, 2020, 2022) and the International Conference on Motivational Interviewing to increase her skills and competence in training and supervising study counselors in Motivational Interviewing interventions. Dr. Walker provided advanced training in Motivational Interviewing and Motivational Enhancement Therapy to Drs. Bergman, Pierce, Jaffe, and Dworkin through formal didactic trainings as well as supervised clinical experience and weekly consultation meetings.

*Advanced Training in Suicide Intervention:* Drs. Bergman & Walker attended a two-day Collaborative Assessment and Management of Suicide (CAMS) training in suicide intervention in preparation for the clinical trial.

*Advanced Training in Statistics:* This project provided experiential training opportunities in advanced quantitative and qualitative analytic approaches for postdoctoral fellows and early career investigators, including Drs. Graupensperger, Jaffe, Pierce, and Walton. For example, Dr. Rhew provided mentorship to Drs. Graupensperger, Jaffe, and Walton in the statistical analysis of the randomized clinical trial. These data also provided an opportunity for Dr. Jaffe to implement advanced statistical approaches, such as random-intercept cross-lagged panel models, within a paper recently published in the Journal of Traumatic Stress. Dr. Pierce also gained experience leading in-depth qualitative analyses and provided others on the coding team (Schoenberger, Drs. Walton & Jaffe) with valuable experience in qualitative approaches.

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

In addition to submitting several manuscripts related to the study protocol and outcomes, we have also presented findings via papers and posters at both international and domestic conferences, accepted invitations to provide webinars and workshops to providers at community agencies that treat traumatic stress, and have reached out and scheduled briefings for military specific groups including Behavioral Health at Joint Base Lewis McChord and the Walter Reed Army Research Institute-West. We presented study findings at the National Centers for PTSD (NCPTSD) weekly staff meeting to key stakeholders including leadership at the NCPTSD. Dr. Kaysen was invited to give a keynote presentation at the Navy Seals Foundation, during which she presented study findings. We have also created a study “brief” (see appendices) to disseminate findings to participants (those who indicated they would like to receive findings) and other interested groups.

In addition to study findings, we have disseminated relevant materials to clinicians, related to the study. The research team was invited by Dr. Iga Jaraczewska with the AMIE School of CBT in Poland to conduct an online training

for Polish and Ukrainian mental health clinicians who are working with Ukrainian refugees. The training described lessons learned in the present trial on ways to apply motivational interviewing to the treatment of and support of individuals exposed to traumatic events.

During the height of the COVID-19 pandemic, and in recognition of the role of active-duty service members in responding to COVID-19, and the potential impact on military healthcare systems and personnel, the study team provided a webinar on Psychological First Aid for healthcare workers to Joint Base Lewis McChord and Madigan Medical Center personnel. The webinar was recorded in order to provide an ongoing resource for base personnel.

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

Final Report/Nothing to Report

5. **IMPACT:**

- c. **What was the impact on the development of the principal discipline(s) of the project?**

Within the field of traumatic stress, this is the first intervention developed to specifically attract participation from military personnel experiencing PTSD to engage in a brief intervention to motivate treatment seeking of PTSD treatment. Findings suggest both Veterans and active duty military personnel were interested in the service. However, our study focused exclusively on active duty and fewer individuals (as evidenced by our lack of ability to meet our original target recruitment goal) volunteered for the service than expected. The ones who did, often had prior experiences with PTSD treatment, although maintained a PTSD diagnosis. This level of prior treatment experience is very different from past Check-Up studies intended to attract treatment naïve samples. The nature of PTSD and symptoms (such as avoidance of memories of the trauma) may be less suited to a traditional Check-Up model. Those who participated, overall decreased their PTSD symptoms and increased treatment initiation. The finding that the MET intervention significantly worked better in reducing PTSD symptoms and increasing treatment seeking for those lower in their confidence to change their PTSD, suggests MET approaches might be particularly suited for the subset of individuals who are hesitant about starting PTSD treatment or who do not believe they can recover. Indicators of readiness to change PTSD are not typically assessed in PTSD clinics and our findings suggest

this assessment may be useful, paired with MET, in order to increase confidence to change and improve treatment outcomes.

**d. What was the impact on other disciplines?**

Nothing to Report

**e. What was the impact on technology transfer?**

Nothing to Report

**f. What was the impact on society beyond science and technology?**

Judging from early interest and response from providers and from Guilford Press for a book informed by the intervention work from this study, this research has the potential to impact the way counselors and providers offer clinical services and practice for PTSD. Traditionally, PTSD treatment has not been integrated with motivational interviewing. Our work details how the treatment of PTSD can specifically benefit from integration of motivational interviewing practices, techniques and principals and direction for implementation.

**6. CHANGES/PROBLEMS:**

**g. Changes in approach and reasons for change**

Early in recruitment of participants, we recognized that focusing on one base (JBLM) as originally planned, was not going to be effective in reaching our target enrollment. We made changes that were suggested by the IPR and approved by our science officer to expand recruitment efforts to include national recruitment through social media and to include Navy personnel. Although we also had hoped to include Marines, ultimately, we did not receive approval to do so. These changes in addition to extending our recruitment period led to a significant increase in participants and got us closer to our target enrollment (163 of 200). Power analyses suggested that ending recruitment in the spring of 2021 would allow us to detect a meaningful effect size and enable us to analyze and disseminate findings from the study.

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

As described above, the major problem facing this trial was low recruitment into the study. We pivoted our recruitment and inclusion efforts to go from local to national recruitment and widen our inclusion criteria to include Navy personnel in addition to Army and Air Force.

i. **Changes that had a significant impact on expenditures**

Nothing to Report

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

Nothing to Report

k. **Significant changes in use or care of human subjects**

Nothing to Report

l. **Significant changes in use or care of vertebrate animals.**

N/A

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

N/A

**7. PRODUCTS (See appendices for each):**

**Journal publications.**

Jaffe, A. E., Walton, T. O., Walker, D. D., & Kaysen, D. L. (2023). Social support and PTSD treatment utilization: Examining reciprocal relations among active-duty service members. *Journal of Traumatic Stress*, 1-12. <https://doi.org/10.1002/jts.22908> *acknowledgement of federal support (yes).*

Held, P., Kaysen, D., & Smith, D. L. (2022). Evaluating changes in negative posttrauma cognition as a mechanism of PTSD severity changes in two separate intensive treatment programs for veterans. *BMC Psychiatry*, 22(1), 1-10. *acknowledgement of federal support (yes).*

Held, P., Steigerwald, V. L., Smith, D. L., Kaysen, D., Van Horn, R., & Karnik, N. S. (2021). Impact of hazardous alcohol use on intensive PTSD treatment outcomes among veterans. *European Journal of Psychotraumatology*, 12(1), 1888541. *acknowledgement of federal support (yes).*

Held, P., Kovacevic, M., Petrey, K., Meade, E. A., Pridgen, S., Montes, M., Werner, B., Miller, M.L., Smith, D.L., Kaysen, D. & Karnik, N. S. (2022). Treating posttraumatic stress disorder at home in a single week using 1-week virtual massed cognitive processing therapy. *Journal of Traumatic Stress*, 35(4), 1215-1225. *acknowledgement of federal support (yes).*

Kaysen, D., Jaffe, A.E., Shoenberger, B., Walton, T.O., Pierce, A., & Walker, D.D. (2023). Does Effectiveness of a Brief Substance Use Treatment Depend on PTSD? An Evaluation of Motivational Enhancement Therapy for Active Duty Army Personnel. *Journal of Studies on Alcohol and Drugs*, 83(6), 924. *acknowledgement of federal support (yes)*

Kaysen, D., Walton, T. O., Rhew, I., Jaffe, A. E., Pierce, A., & Walker, D. D. (2022). Development of StressCheck: A telehealth motivational enhancement therapy to improve voluntary engagement for PTSD treatment among active-duty service members. *Contemporary Clinical Trials*, 119, 106841. <https://doi.org/10.1016/j.cct.2022.106841> *acknowledgement of federal support (yes)*

Walker, D.D., Jaffe, A., Pierce, A., Walton, T., & Kaysen, D. (2020). Discussing substance use with clients during Covid-19 pandemic: An MI Approach. *Psychological Trauma, Theory, Research, Practice, and Policy*, 12(S1): S115-S117. <https://doi.apa.org/fulltext/2020-41436-001.html> *acknowledgement of federal support (yes)*

Dworkin, E.R., Bergman, H. E., Walton, T. O., Walker, D.D., & Kaysen (2018). Co-Occurring PTSD and AUD in U.S. Military and Veteran Populations. *Alcohol Research: Current Reviews*, 39 (2), 161-169. *acknowledgement of federal support (yes)*

#### Under review

Held, P., Splaine, C., Smith, D. L., & Kaysen, D. L. (2022) Examining Trauma Cognition Change Trajectories Among Initial PTSD Treatment Non-Responders: A Potential Avenue to Guide Subsequent Treatment Selection. *Manuscript under review. acknowledgement of federal support (yes).*

Walker, D.D., Walton, T.O., Jaffe, A.E., Graupensperger, S., Rhew, I.C., Kaysen, D. (2022). Improving voluntary engagement for PTSD treatment among active-duty service members using motivational enhancement therapy. *Manuscript under review. acknowledgement of federal support (yes)*

Walton, T.O. (2022). Military sexual trauma, mental health, alcohol use disorder, and suicidality among lesbian, gay, and bisexual active-duty US military personnel. *Manuscript under review. acknowledgement of federal support (yes)*

#### i. **Books or other non-periodical, one-time publications.**

Nothing to Report

#### ii. **Other publications, conference papers, and presentations.** \*Indicates presentation resulted in publication.

Kaysen, D. & Walker, D.D. (2022, June). *Use of Motivational Interviewing with Trauma Exposed Populations* [Invited webinar]. Program Akademie Motocykli i Edukacji (AMIE) School of CBT for Ukraine, Warsaw, Poland. Translated into English, Polish and Ukrainian for providers and volunteers working with Ukrainian refugees.

\*Kaysen, D., Walton, T.O., Jaffe, A., Graupensperger, S., Rhew, I., & Walker, D. (2022, June 3). Improving voluntary engagement for PTSD treatment among active-duty service members using motivational enhancement therapy. In K. van Stolk-Cooke (Chair), *Beyond mobile apps: Alternative technology-based interventions to engage trauma survivors* [Organized paper symposia] Society for Prevention Research 30<sup>th</sup> Annual Meeting, Seattle, WA, United States.

Kaysen, D., Walker, D., Walton, T.O., Jaffe, A.E., & Rhew, I. (2022, July). *The perception and practice gap: PTSD treatment preferences among United States active-duty service members*. [Paper presentation]. 15<sup>th</sup> World Conference for Person-Centered and Experiential Psychotherapy and Counseling, Copenhagen, Denmark.

\*Walker, D., Walton, T.O., Jaffe, A., Rhew, I., Kaysen, D. (2022, July). *Attracting and Engaging High Risk Non-Treatment Seekers: The Stress Check*. [Paper presentation]. 15<sup>th</sup> World Conference for Person-Centered and Experiential Psychotherapy and Counseling, Copenhagen, Denmark.

Walton, T. O. (2022, July). *An initial investigation of mental health, suicidality, and victimization among active-duty lesbian, gay, and bisexual US military service members*. [Paper presentation]. Annual Meeting of the International Academy of Sex Research, Reykjavík, Iceland.

Walton, T. O., Jaffe, A. E., Walker, D. D., & Kaysen, D. (2022, July). *Understanding military sexual trauma as institutional betrayal and its association with perceptions of external supports*. [Poster presentation]. Annual Meeting of the International Academy of Sex Research, Reykjavík, Iceland.

Jaffe, A. E., Walton, T. O., Walker, D. D., & Kaysen, D. (2022, July). *Sexual violence among active-duty service members with varying sexual identities, attraction, and behavior*. [Poster presentation]. Annual Meeting of the International Academy of Sex Research, Reykjavík, Iceland.

Kaysen, D., (2022, October). *The State of the Science on Accessible, Scalable, and Effective Treatments for Trauma-Related Disorders and Related Comorbidities*. [Keynote speaker]. IMPACT FORUM 2022 - Navy Seals Foundation. San Diego, CA, United States.

Kaysen, D., & Walker, D. (2022, November). *Use of motivational interviewing for individuals with PTSD: Ways to increase treatment engagement, retention, and readiness to change*. [Workshop]. Association for Behavioral and Cognitive Therapies Annual Convention, New York, NY, United States.

\*Kaysen, D., Walton, T., Graupensper, S., Rhew, I., Jaffe, A., Pierce, A., Walker, D. (2022). *Improving Voluntary Engagement for PTSD Treatment Among Active Duty Service Members Using Motivational Enhancement Therapy* [Presentation]. Presented at the ADAA, Denver, CO.

\*Kaysen, D., Walton, T.O., Jaffe, A., Graupensperger, S., Rhew, I., & Walker, D. (2022, November). Improving voluntary engagement for PTSD treatment among active-duty service members using motivational enhancement therapy. In D. Kaysen & K. van Stolk-Cooke (Chairs), *Novel approaches to increase access to and engagement in PTSD treatment* [Organized paper symposia]. Association for Behavioral and Cognitive Therapies Annual Convention, New York, NY, United States.

Kehle-Forbes, S., Kaysen, D., Norman, S., Zielinski, M., & Rauch, S. (2022, November). *Learning from Forced Flexibility: Carrying the Lessons of the COVID-19 Pandemic Forward to Increase Access to and Responsivity of PTSD Treatment Outcome Research*. Panel discussion. International Society for Traumatic Stress Studies, Atlanta, GA, United States.

Bergman, H.E., Jaffe, A.E., Kaysen, D.L., & Walker, D.D. (2020). *Lessons Learned in the Use of Motivational Enhancement Therapy to Increase PTSD Treatment Engagement with a Combat Veteran: A Case Study* [Talk]. Montana VA Psychology Grand Rounds Series, Montana VA Health Care System, Bozeman, MT.

Walker, D.D. (2019). *Cannabis Use and PTSD: Exploring Effects on Etiology, Maintenance and Recovery* [Symposium Discussant]. Presented at the International Society for Traumatic Stress Studies, Boston, MA.

Bergman, H. E., Dworkin, E. R., DeCou, C., Walton, T. O., Kaysen, D., & Walker, D. (2018). *Association of psychopathology and post-deployment social support with suicidal ideation among soldiers with untreated alcohol use disorder* [Talk]. Meeting of the International Society for Traumatic Stress Studies, Washington, DC.

n. **Website(s) or other Internet site(s)**

Nothing to Report

o. **Technologies or techniques**

Nothing to Report

p. **Inventions, patent applications, and/or licenses**

Nothing to Report

q. **Other Products**

i. *clinical interventions;*

StressCheck MET manual, personalized feedback report (PFR) clinical tool, and accompanying “Understanding your Personalized Feedback Report” document. See Appendices for each.

**8. PARTICIPANTS & OTHER COLLABORATING ORGANIZATIONS**

r. **What individuals have worked on the project?**

i.

<b>Name:</b>	Denise Walker, PhD
<b>Project Role:</b>	Co-PI
<b>Researcher Identifier:</b>	orcid.org/0000-0002-3811-5239
<b>Nearest person months worked:</b>	Year 1:3.86 CM, Year 2:4.20 CM, Year 3:4.47 CM, Year 4:4.56 CM, NCE:3.76 CM, NCE2:4.95 CM
<b>Contribution to Project:</b>	Dr. Walker has contributed to the study by: <ul style="list-style-type: none"><li>• Contributing substantially to the development of the novel intervention – and is lead on the manual development for the Motivational Enhancement Therapy content</li><li>• Navigating systems at JBLM and building collaboration with JBLM stakeholders</li><li>• Overseeing hiring and supervision of current staff</li><li>• Assisting with development of marketing campaign</li></ul>

	<ul style="list-style-type: none"> <li>• Finalizing measure selection for informing the intervention</li> <li>• Gaining necessary approvals from JBLM leadership</li> <li>• IRB and HRPO oversight</li> <li>• Developing procedures for focus groups</li> <li>• Conducting focus groups</li> <li>• Provide supervision and training of project counselors</li> <li>• Coding of MET intervention sessions</li> <li>• Manuscript preparation</li> <li>• Attending weekly study exec meetings</li> <li>• Working on manuscripts &amp; presentations related to study aims</li> </ul>
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<i>Name:</i>	Debra Kaysen, PhD
<i>Project Role:</i>	Co-PI
<i>Researcher Identifier:</i>	orcid.org/0000-0001-7961-2787
<i>Nearest person months worked:</i>	Year 1:3.81 CM, Year 2:4.80 CM, Year 3:3.55 CM, Year 4:1.2 CM, NCE: 1.5 CM, NCE2: 1.65 CM
<i>Contribution to Project:</i>	<p>Dr. Kaysen has contributed to the study by:</p> <ul style="list-style-type: none"> <li>• Contributing substantially to the development of the novel intervention – and is lead on the PTSD treatment content</li> <li>• Building collaboration with JBLM stakeholders</li> <li>• Recruiting for post-doctoral fellow and assessor positions</li> <li>• Assisting with development of marketing campaign</li> <li>• Finalizing measure selection for informing the intervention</li> <li>• Developing procedures for focus groups</li> <li>• Conducting focus groups</li> <li>• Establishing our Data Safety and Monitoring Plan</li> <li>• Provide supervision and training of project counselors</li> <li>• Provide training and supervision to project assessors</li> <li>• Manuscript preparation</li> <li>• Attending weekly study exec meetings</li> <li>• Working on manuscripts and presentations related to study aims</li> <li>• Providing content on COVID-19 and mental health interventions</li> </ul>

<i>Name:</i>	Thomas Walton, PhD, MSW
<i>Project Role:</i>	Project Director
<i>Researcher Identifier:</i>	orcid.org/0000-0001-9011-8333
<i>Nearest person months worked:</i>	Year 1:6.00 CM, Year 2:6.00 CM, Year 3:6.50 CM, Year 4:6.40 CM, NCE:7.25 CM, NCE2:6.00 CM
<i>Contribution to Project:</i>	<p>Dr. Walton has contributed to the study by:</p> <ul style="list-style-type: none"> <li>• Development and management of data collection systems</li> <li>• Design and creation of recruitment materials</li> <li>• Assist with IRB compliance</li> <li>• Provide consultation and guidance on conducting clinical trials in a military context</li> <li>• Transitioned from Data Manager/Research Consultant to Interim Project Director in May of 2019</li> <li>• Conducting assessments with prospective and enrolled participants</li> <li>• Quality assurance of data collection and intervention fidelity</li> <li>• Participating in recruitment activities</li> <li>• Transition to Project Director in August 2021</li> </ul>

<i>Name:</i>	Adam Pierce, PhD
<i>Project Role:</i>	Project Director, August 2019 – August 2021
<i>Researcher Identifier:</i>	orcid.org/0000-0003-3524-2571
<i>Nearest person months worked:</i>	Year 3:4.00 CM, Year 4:12.00 CM, NCE:9.00 CM
<i>Contribution to Project:</i>	<p>Dr. Pierce contributed to the study by:</p> <ul style="list-style-type: none"> <li>• Day-to-day oversight of all study activities</li> <li>• Primary supervision of study staff</li> <li>• Clinical consultation</li> <li>• Coordinating collaborative activities with JBLM stakeholders</li> <li>• Assisting with IRB compliance</li> <li>• Implementation of all study activities and protocols</li> <li>• Quality assurance of data collection and intervention fidelity</li> <li>• Conducting assessments with prospective and enrolled participants</li> <li>• Conducting the clinical intervention with participants</li> <li>• Attending weekly clinical supervision meetings</li> </ul>

	<ul style="list-style-type: none"> <li>• Conducting in-person presentations and briefings at JBLM as part of recruitment efforts</li> <li>• Participating in recruitment activities</li> <li>• Leading weekly exec meetings</li> </ul>
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<i>Name:</i>	Ernest McGarry, LMHC
<i>Project Role:</i>	Study Counselor
<i>Researcher Identifier:</i>	n/a
<i>Nearest person months worked:</i>	Year 2:6.00 CM, Year 3:3.00 CM
<i>Contribution to Project:</i>	Mr. McGarry has contributed to the study by: <ul style="list-style-type: none"> <li>• Conducting the clinical intervention with participants</li> <li>• Attending weekly clinical supervision meetings</li> <li>• Participating in recruitment activities</li> </ul>

<i>Name:</i>	Devon Bushnell
<i>Project Role:</i>	Program Operations Specialist
<i>Researcher Identifier:</i>	n/a
<i>Nearest person months worked:</i>	Year 1:3.00 CM, Year 2:3.00 CM, Year 3:3.00 CM, Year 4:2.40 CM, NCE:1.75 CM, NCE2:2.60 CM
<i>Contribution to Project:</i>	Ms. Bushnell has contributed to the study by providing: <ul style="list-style-type: none"> <li>• Budget oversight</li> <li>• Human resources management</li> <li>• Office administration</li> </ul>

<i>Name:</i>	Hannah Bergman, PhD
<i>Project Role:</i>	Project Director – August 2017-2019
<i>Researcher Identifier:</i>	orcid.org/0000-0002-6997-4052
<i>Nearest person months worked:</i>	Year 1:3.00 CM, Year 2:12.00 CM, Year 3:8.00 CM
<i>Contribution to Project:</i>	Dr. Bergman has contributed to the study by: <ul style="list-style-type: none"> <li>• Day-to-day oversight of all study activities</li> <li>• Primary supervision of study staff</li> <li>• Clinical consultation</li> <li>• Coordinating collaborative activities with JBLM stakeholders</li> <li>• Contributing to the development of the novel intervention and other study materials, such as the PFR</li> <li>• Development of Resource Booklets</li> </ul>

	<ul style="list-style-type: none"> <li>• Assist with IRB compliance</li> <li>• Implementation of all study activities and protocols</li> <li>• Quality assurance of data collection and intervention fidelity</li> <li>• Conducting assessments with prospective and enrolled participants</li> <li>• Conducting the clinical intervention with participants</li> <li>• Attending weekly clinical supervision meetings</li> <li>• Conducting in-person presentations and briefings at JBLM as part of recruitment efforts</li> <li>• Participating in recruitment activities</li> <li>• Leading weekly exec meetings</li> </ul>
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<i>Name:</i>	Cameron Paine-Thaler, LAICSW
<i>Project Role:</i>	Study Assessor
<i>Researcher Identifier:</i>	
<i>Nearest person months worked:</i>	NCE:2.50 CM
<i>Contribution to Project:</i>	<p>Ms. Paine-Thaler has contributed to the study by:</p> <ul style="list-style-type: none"> <li>• Conducting assessments with prospective and enrolled participants</li> <li>• Attending weekly assessment fidelity meetings</li> <li>• Participating in recruitment activities</li> </ul>

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

- i. Dr. Walker’s active support increased in the final 6 months of the study, with approval from the program official, to increase activities related to dissemination of findings

t. **What other organizations were involved as partners?**

Nothing to Report

**9. SPECIAL REPORTING REQUIREMENTS**

u. **COLLABORATIVE AWARDS:** N/A

v. **QUAD CHARTS:** See appendices.

**10. APPENDICES:**