

## ISSUE 19(2)

APRIL 2025

CTU-Online contains summaries of clinically relevant research articles.

Articles authored by staff of the National Center for PTSD are available in full text; just click the link. For other articles we provide a link to where you might be able to view or download the full text and a PTSDpubs ID for easy access. ([What is PTSDpubs?](#))

If you have trouble accessing the full article, see the box at the bottom of the last page for help.

We welcome feedback from readers about content and format. Please email us at [ncptsd@va.gov](mailto:ncptsd@va.gov).

[Subscribe to CTU-Online](#)

[Search past issues in PTSDpubs](#)

[Visit www.ptsd.va.gov](http://www.ptsd.va.gov)

### Editor

Paula P. Schnurr, PhD

### Senior Associate Editor

Sadie E. Larsen, PhD

### Associate Editors

Kristina L. Caudle, PhD

Paul E. Holtzheimer, MD

Erika M. Roberge, PhD

Lauren M. Sippel, PhD

Jennifer S. Wachen, PhD

Rachel Zerkowicz, PhD



CTU-Online is published 6 times per year by the National Center for PTSD, Executive Division.

## ASSESSMENT

### Psychometric evaluations of the Past Week and Past Day PCL-5

The PCL-5 is the most commonly used self-report measure of past-month PTSD symptoms. It has been adapted and widely used in clinical settings to assess symptom change and inform treatment decisions in both weekly and massed treatment. For that purpose, it would be most helpful to assess symptoms only since a prior appointment, whether in the past week or the past day. However, neither the Past Week PCL-5 or the Past Day PCL-5 have been validated to confirm that they capture PTSD symptoms during those specific time frames, ideally validated against a gold-standard measure such as the CAPS-5. Two recent studies of the Past Week and Past Day PCL-5 in treatment samples offer some initial psychometric data.

Investigators from VA Boston and the STRONG STAR Consortium examined the validity of the Past Week PCL-5 in pooled data from five PTSD RCTs with 671 Veterans and service members. First, investigators examined the factor structure of the Past Week PCL-5, finding that a five-factor model of symptoms was a better fit than the four-factor model based on the DSM-5, and that this factor structure was similar whether using the Past Month or Past Week PCL-5. They also examined the internal consistency of the Past Week PCL-5, and whether it correlated as expected with the PHQ-9, which has a 2-week timeframe, across the first 4 weeks of treatment. They found that the Past Week PCL-5 had high internal consistency (all  $\omega$ 's between .93 and .96, equivalent to the Past Month PCL-5). Each Past Week PCL-5 was correlated with its corresponding PHQ-9, with  $r$ s between .80 and .87.

A second team led by an investigator from the Salt Lake City VA Medical Center analyzed data from four separate clinics delivering massed PTSD treatment (mainly CPT or PE) on a schedule from 3 days a week to daily. The Past Day PCL-5 was administered to 222 Veterans, service members, and civilians to monitor symptom change at each treatment session, along with Past Week and Past Month PCL-5 and Past Week or Past Month CAPS-5, depending on the site. At each site, the Past Day PCL-5 demonstrated strong internal consistency ( $\alpha > .91$ ) and test-retest reliability (intraclass correlation coefficient = .71-.92). The baseline Past Day PCL-5 correlated with baseline Past Month CAPS-5 between  $r = .50$  to  $r = .64$  depending on the site, whereas the final Past Day PCL-5 correlated with post-treatment Past Week CAPS-5 between  $r = .60$  and  $r = .70$ , depending on the site.

Together, these findings indicate that the Past Day and Past Week PCL-5 are reliable measures that correlate with depression and with other measures of PTSD symptoms. Future research should validate each PCL-5 version against a clinician-rated scale in the same time period. How to validate the Past Day PCL-5 is especially challenging because there is no past-day CAPS, and the frequency scale on the CAPS-5 is not designed to capture frequency at a daily level for many items. Additional strategies will be needed to validate the daily measure. For now, these data on alternative time frames are promising and support the use of these measures in the clinical settings where they are required.

Read the articles:

<https://www.ptsd.va.gov/professional/articles/article-pdf/id1646008.pdf>

Darnell, B. C., Vannini, M. B. N., Morgan-López, A., Brown, S. E., Grunthal, B., Hale, W. J., . . . Litz, B. T. (2025). Psychometric evaluation of the weekly version of the PTSD Checklist for DSM-5. *Assessment*. Advance online publication. PTSDpubs ID: 1646008

Roberge, E. M., Wachen, J. S., Bryan, C. J., Held, P., Rauch, S. A. M., & Rothbaum, B. O. (2025). Assessing symptom change in massed PTSD treatments: Psychometric evaluation of the past day posttraumatic stress disorder checklist for DSM-5. *Psychological Trauma*. Advance online publication. PTSDpubs ID: 1646000

## TREATMENT

### RCT of topiramate with PE for PTSD and alcohol use disorder

Psychotherapy that integrates treatment of comorbid PTSD and alcohol use disorder (AUD) has shown promise in treating both conditions (see the December 2018 CTU-Online). Another approach is combining psychotherapy and medication to treat this comorbidity. A team led by investigators from NCPTSD tested whether a combination of PE with topiramate, an anticonvulsant medication that is recommended for treating AUD in the 2021 VA/DoD clinical practice guideline for substance use disorders, would effectively treat PTSD/AUD. In this double-blind RCT 100 Veterans with PTSD/AUD were randomized to PE+topiramate or PE+placebo. Participants first started medications, which they took for 16 weeks (up to 200mg topiramate). PE lasted for 12 weeks, with timing such that maximum medication dosage should have been reached by the time imaginal exposure started. Completion rates did not significantly differ between groups (60% for PE+topiramate and 48% for PE+placebo). Both conditions showed improvements in primary outcomes of heavy drinking days and CAPS-5 scores. There was no difference between conditions in heavy drinking days. The PE+topiramate group had greater improvements in CAPS-5 at post-treatment ( $d=.7$ ) but not at 3- or 6-month follow-up. Overall, this study suggests that topiramate, despite its short-term benefit on alcohol use, does not enhance the effectiveness of PE alone for treating PTSD/AUD.

Read the article:

<https://www.ptsd.va.gov/professional/articles/article-pdf/id1646348.pdf>

Norman, S. B., Luciano, M. T., Panza, K. E., Davis, B. C., Lyons, M., Martis, B., . . . Anthenelli, R. M. (2025). A randomized clinical trial of prolonged exposure therapy with and without topiramate for comorbid PTSD and alcohol use disorder. *American Journal of Psychiatry*. Advance online publication. PTSDpubs ID: 1646348

### Another study of combined brexpiprazole and sertraline for PTSD

Certain antidepressant medications are recommended treatments for PTSD, but the 2023 VA/DoD PTSD clinical practice guideline recommends select psychotherapies as first-line treatment over these medications. Therefore, finding ways to enhance medication effectiveness would be helpful for patients who prefer medication or who have had insufficient responses to medication. A prior Phase 3 study found that sertraline in combination with brexpiprazole, an antipsychotic medication that is also used for treating depression and other disorders, was effective for PTSD. A new article reports on a Phase 2 trial that led to that Phase 3 trial (see February 2025 CTU-Online). Investigators from the University of Alabama conducted a multi-site, double-blind study that randomized

321 individuals with PTSD (CAPS-5 $\geq$ 33; mean age=39.2, 62% female) into one of four treatment conditions for 11 weeks: brexpiprazole+sertraline, brexpiprazole+placebo, sertraline+placebo, or placebo+placebo. Sertraline was flexibly dosed at 100-200mg, and brexpiprazole at 1-3mg. Completion rates ranged from 66.7% (brexpiprazole+placebo) to 77.1% (placebo+placebo). The brexpiprazole+sertraline group had greater improvement in CAPS-5 severity scores at week 10 (16.4 points) than all other groups. This group had better secondary outcomes as well. Brexpiprazole was well-tolerated. Similar to the other reported study, this one showed promising effects for brexpiprazole+sertraline. However, both trials excluded individuals with a current major depressive episode or primary anxiety disorder, which limits generalizability given the high comorbidity between PTSD and depression and anxiety. Research to extend these findings to military and/or Veteran samples and to those with common comorbid disorders would be helpful.

Read the article: <https://doi.org/10.4088/JCP.24m15577>

Hobart, M., Chang, D., Hefting, N., & Davis, L. L. (2025). Brexpiprazole in combination with sertraline and as monotherapy in posttraumatic stress disorder: A full-factorial randomized clinical trial. *Journal of Clinical Psychiatry*, 86(1), Article 24m15577. PTSDpubs ID: 1645388

### Capnometry-guided respiratory intervention for PTSD

Freespira is a capnometry-guided respiratory intervention (CGRI) that gives breath-by-breath feedback on respiratory rate and exhaled carbon dioxide levels. It has shown efficacy for treating panic and some preliminary efficacy for PTSD (see the February 2023 CTU-Online). A team led by investigators from the company that markets Freespira reported naturalistic data on Veterans receiving the intervention for PTSD. VA providers referred 164 Veterans (mean age=47.4 years, 72.6% male) with PTSD and a PCL-5 $\geq$ 28 to receive CGRI. A PCL-5 was recorded at pre- and post-treatment for those who completed treatment. Treatment consisted of using CGRI for 17 minutes twice daily for 28 days, along with receiving weekly coaching calls on CGRI use. On average, Veterans completed 41.8 sessions (75% of expected sessions). PCL-5 scores decreased by 12.2 points (Glass's  $\delta=.99$ ), which is modest despite the large pre-post effect size. Over half the sample (53%) had at least a 10-point PCL-5 reduction. To date, CGRI has been studied using naturalistic data and one open-label, waitlist-controlled study. More rigorous research, including sham control and intent-to-treat blinded evaluation and follow-up data, is needed in order to determine CGRI's effectiveness.

Read the article: <https://doi.org/10.3390/healthcare13040390>

Cuylar, R. N., Mojgani, J. S., da Costa, J. C. A., & Freire, R. C. (2025). Capnometry-guided respiratory intervention in veteran PTSD: Impact on symptom clusters. *Healthcare (Basel)*, 13(4), Article 390. PTSDpubs ID:1645432

### Does exercise improve PTSD symptoms?

Exercise has demonstrated benefits for physical and mental health, but specific benefits for PTSD have not been demonstrated. A team led by investigators from the San Francisco VA Medical Center conducted an RCT examining the effectiveness of group exercise to improve PTSD symptoms and quality of life. The sample included 84 Veterans (69% male, mean age=52) with a PTSD diagnosis and/or clinically meaningful

PTSD symptoms (CAPS-5 $\geq$ 23). Participants were randomly assigned to receive integrated exercise or a PTSD recovery class 3 times per week for 12 weeks. Integrated exercise involved aerobic exercise and strength training, stretching, and mindful breathing techniques. The recovery class comparison condition was a present-focused, cognitive-behavioral coping skills intervention that included psychoeducation and skills training. Participants completed assessments at baseline, posttreatment, and 6-month follow-up. There was a modest reduction at post-treatment in the total CAPS-5 score in both groups (integrated exercise: 8.2; recovery: 7.8), with no significant differences between groups. There also were no differences in response rate (10-point drop in CAPS-5: integrated exercise=41%, recovery=44%), loss of diagnosis, or remission status. Further, there were no significant changes in either condition in quality of life. Findings indicate that despite the many general benefits of exercise, the integrated exercise intervention is not an effective treatment for PTSD compared to a psychoeducation and coping skills training.

Read the article: <https://doi.org/10.1186/s12888-025-06638-1>

Neylan, T. C., Muratore, L. A., Williams, C. L., Schmitz, M., Valdez, C. V., Maguen, S., . . . Mehling, W. E. (2025). Group integrated exercise versus recovery class for veterans with posttraumatic stress disorder: A randomized clinical trial. *BMC Psychiatry*, 25(1), Article 185. PTSDpubs ID: 1645332

## New study demonstrates feasibility of PTSD treatment during hospitalization

PTSD is linked to risk of suicide, and treating PTSD symptoms results in decreased suicidal ideation in outpatient settings (see the April 2021 [CTU-Online](#)). An RCT led by NCPTSD investigators tested whether administering Written Exposure Therapy with Crisis Response Planning (WET+) to patients hospitalized for suicide risk could decrease PTSD symptoms and suicide-related outcomes. Participants included 95 patients (94% active duty, 61% male) who had been hospitalized for suicidal thoughts, plans or behaviors and had elevated PTSD symptoms (CAPS-5 $>$ 20). Participants were randomized to either WET+ ( $n=47$ ) or treatment as usual (TAU;  $n=48$ ). WET+ consisted of 5 sessions; the first session included the crisis response plan development. Most WET+ participants concluded the protocol following their discharge. WET+ participants also received TAU elements while hospitalized (e.g., medications, discharge planning), and TAU participants received safety planning. Dropout across the trial was 31%. Although suicidal ideation and PTSD symptoms improved in both groups, there were no significant differences in clinician-assessed suicidal ideation endorsement or PTSD symptoms by treatment at one-month follow-up in WET+ vs. TAU, respectively (SI  $d=1.2$  vs. 1.1; CAPS-5  $d=.7$  vs. .4). WET+ participants showed significant improvements relative to TAU on self-reported PTSD symptoms at 1-month ( $d=1.0$  vs. .7) but not 4-month follow-up ( $d=.8$  vs. .6). This study demonstrates the feasibility of administering WET+ during a high-risk period, which could be helpful in situations in which usual care offers minimal treatment focused on PTSD or suicidal ideation.

Read the article: <https://www.ptsd.va.gov/professional/articles/article-pdf/id1645660.pdf>

Kearns, J. C., Straud, C. L., Stanley, I. H., Sloan, D. M., Fina, B. A., Young-McCaughan, S., . . . Marx, B. P. (2025). Written exposure therapy for posttraumatic stress symptoms and suicide risk: a randomized controlled trial with high-risk patients admitted to a military inpatient psychiatric unit. *Suicide and Life-Threatening Behavior*, 55(2), e70008. PTSDpubs ID: 1645660

## Improving systems to support engagement in PTSD treatment

Dropout from PTSD treatment remains challenging to predict, with many studies examining the contribution of patient-level factors. However, the clinical processes and systems within which care is delivered have an impact on engagement as well. Understanding these systems and the barriers to care delivery within them can lead to opportunities for process improvement. Two new studies address organizational barriers and solutions related to engagement in PTSD treatment.

A team led by investigators at the National Center for PTSD examined both patient-level demographic variables and organizational factors associated with dropout from CPT and PE for PTSD delivered in an outpatient VA PTSD specialty setting. Of the 557 Veterans who initiated CPT or PE, 47% did not complete treatment. Veterans endorsed an average of three barriers to care, which did not predict dropout. Rather, longer wait time between evaluation and treatment initiation predicted lower likelihood of treatment completion ( $OR=.99$ ), whereas older age was associated with higher likelihood of completion ( $OR=1.02$ ). For each additional day between evaluation and treatment, likelihood of completion decreased 1%, which adds up to almost 30% for the study average of 28.5 days.

In another study of real-world clinical care, investigators at Rush University examined the outcomes of a clinic redesign intended to reduce wait times between referral and treatment in their Road Home intensive PTSD treatment program. They changed their intake process such that a dedicated team of providers would conduct all intake assessments instead of this responsibility being shared across all providers. The dedicated intake team was composed of a Patient Care Navigator (a non-clinical staff member who provides resources and registration services), two master's level clinicians, and one doctoral level manager. The team analyzed pre-post-clinic redesign data from 1010 service members and Veterans. Before the redesign, 34 unique providers conducted intakes, compared to four after implementation of the intake team. Presence of the new intake team was associated with faster program decision (by one week) and start date (two months faster). After the intake redesign, fewer people dropped out between initial registration and starting the treatment program.

Taken together, these studies suggest that implementing strategies for reducing the duration of time between treatment referral and initiation may increase likelihood of treatment engagement and completion. However, since neither study had a randomized controlled design, they cannot definitively show that reducing wait times increases treatment completion, nor that intake teams lead to shorter wait times.

Read the articles:

<https://www.ptsd.va.gov/professional/articles/article-pdf/id1645540.pdf>

Maieritsch, K. P., Lamp, K., Larsen, S. E., & Hessinger, J. D. (2025). The impact of patient barriers and organizational factors on treatment dropout in posttraumatic stress disorder specialty care. *Psychological Services*. Advance online publication. PTSDpubs ID: 1645540

<https://www.ptsd.va.gov/professional/articles/article-pdf/id1645540.pdf>

Coleman, J. A., Werner, B., Klassen, B. J., Smith, D. L., Banerjee, U., & Held, P. (2024). Implementation of a dedicated intake team reduces time to massed PTSD treatment. *Journal of Behavioral Health Services & Research*. Advance online publication. PTSDpubs ID: 1643028specialty care. *Psychological Services*. Advance online publication. PTSDpubs ID: 1645540

# Take NOTE

## A systematic review and meta-analysis of moral injury outcome measures

A team led by investigators from the Central Arkansas Veterans Healthcare System conducted a systematic review of the psychometrics of 13 moral injury measures and a meta-analysis of their associations with PTSD and depression.

Read the article:

<https://www.ptsd.va.gov/professional/articles/article-pdf/id1644723.pdf>

Griffin, B. J., Price, L. R., Jenkins, Z., Childs, A., Tong, L., Raciborski, R. A., . . . Vogt, D. (2025). A systematic review and meta-analysis of moral injury outcome measures. *Current Treatment Options in Psychiatry*, 12(1), ArtID: 7. PTSDpubs ID: 1644723

## A systematic review and meta-analysis of cultural adaptations to trauma assessments and treatments

Investigators from the University of London conducted a systematic review of adaptations to trauma assessments and treatments along with a meta-analysis of treatment outcomes among racial and ethnic minority groups.

Read the article: <https://doi.org/10.1177/15248380251320982>

Benjamin, L., Gillard, S., Jones Nielsen, J., Costa, E. S. M., & Sin, J. (2025). Cultural adaptations to the assessment and treatment of trauma experiences among racial and ethnic minority groups: A mixed-methods systematic review and meta-analysis. *Trauma Violence & Abuse*. Advance online publication. PTSDpubs ID: 1645364



Veterans Health  
Administration

## Trouble Getting the Full Text of an Article?

Articles authored by National Center for PTSD staff are available in full text. For other articles we provide a link to where you might be able to view or download the full text. VA clinicians might have privileges through their VA library or university affiliation; however, VA firewalls sometimes block permissions to access reference materials. If you cannot access the full text of any of these articles, we advise that you contact your local librarian or web/internet technical person.